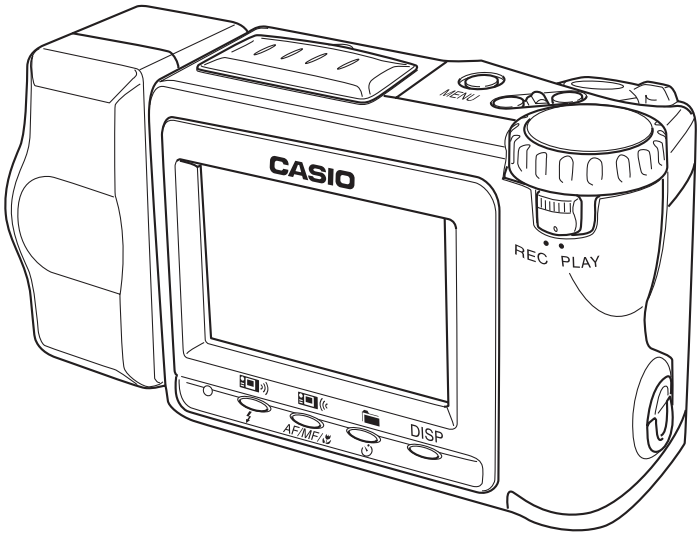
SERVICE MANUAL & PARTS LIST (without price)

QV-7000SX

(KX-778)

OCT. 1998



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CASIO®

Ver.1 Aug / 1999

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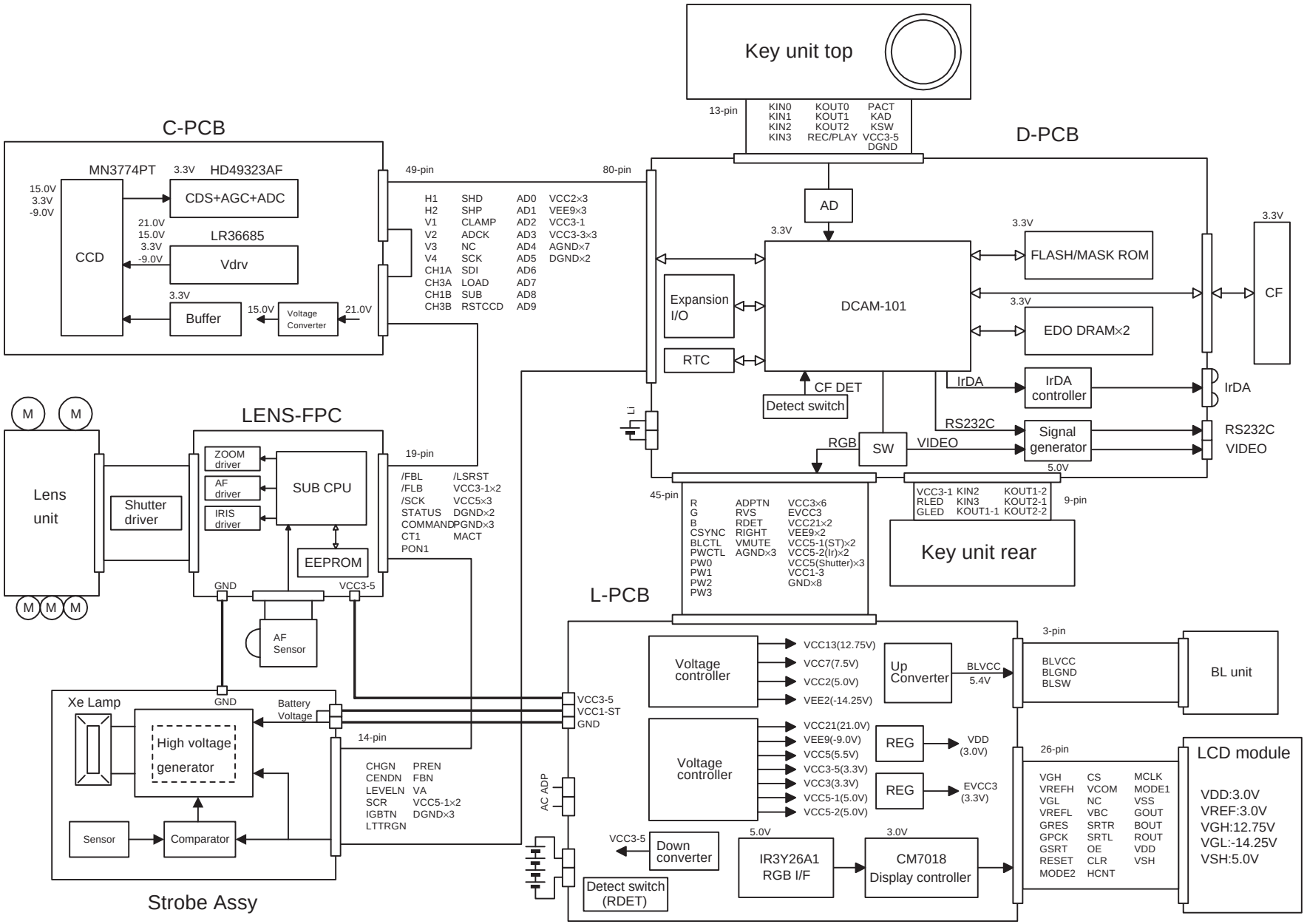
SPECIFICATIONS

Item	Specification
Record Format	JPEG (with COMPACTFLASH memory card)
Recording Medium	COMPACTFLASH memory card
Memory Capacity/ File Size	S (1280 x 960): 88/14 minimum (500 KB per image) F (1280 x 960): 123/19 minimum (350 KB per image) N (1280 x 960): 206/33 minimum (200 KB per image) E (640 x 480): 340/55 minimum (112 KB per image) Movie (3.2 seconds): 85/13 groups minimum (5 frames per second, 1 image =4 frames x 4) Movie (6.4 seconds): 85/13 groups minimum (10 frames per second, 1 image =16 frames x 4) Movie (12.8 seconds): 85/13 groups minimum (5 frames per second, 1 image =16 frames x 4) The above figures are approximations only. The actual number of images depends on image subject matter. Values such as 85/13 indicate the number of images that can be stored on a 48MB/8MB CompactFlash card.
Image Deletion	Single image; all images in a folder; all images in memory card (with image protection)
Imaging Element	1/3-inch square pixel color CCD (Total Pixels: 1,320,000; Effective Pixels: 1,250,000)
Lens	F2.8 to 3.5 f = 5.0 to 10.0mm (equivalent to 32 to 64mm on a 35mm camera)
Zoom	2X optical zoom, 8X digital zoom (when used in combination with optical zoom)*
Focusing	Phase-difference detection system auto focus, manual focus; with macro mode and focus lock
Focus Range	(from surface of lens protection filter) 0.25m to ∞ (standard)/10cm (macro) (10cm to ∞ with manual focus) The above figures are approximations only.
Exposure	Light Metering: Multi-pattern/spot metering by CCD Exposure: Program AE, aperture priority AE Exposure Compensation: –2EV to +2EV (1/4EV units)
Shutter	CCD shutter, mechanical shutter
Shutter Speed	1/4 to 1/1000 second (1 second in Night Mode)
Aperture	F2.8 to F14 automatic and manual switching
White Balance	Automatic, fixed (4 modes), manual switching
Self-timer	10 seconds, 2 seconds
Flash Modes	AUTO, ON, OFF, Red-eye reduction
Flash Range	Approximately 0.7 to 2 meters
Recording Functions	Single image; self-timer; movie; panorama; timer; title; macro; monochrome; sepia; Sports Mode; Night Mode
Monitor/Viewfinder	2.5-inch TFT, low-glare color HAST LCD (122,100 pixels)
Clock	Built-in quartz digital clock; date and time recorded with image; auto calendar up to 2049
Input/Output Terminals	DIGITAL OUT, VIDEO OUT (NTSC and PAL), AC adaptor connector
Infrared Communication	IrDA1.1; IrTran-P compliant
Power Supply	Four batteries (AA-size alkaline or lithium batteries) Four rechargeable batteries (AA-size Ni-MH batteries (NP-H3)) AC adaptor (AD-C620)
Power Consumption	Approximately 7.2 W
Dimensions	140.5 (W) x 75 (H) x 52.5 (D) mm (5.5" (W) x 3" (H) x 1.7" (D))
Weight	Approximately 280g (9.9 oz) (excluding batteries)
Standard Accessories	2-way shoulder/wrist strap; soft case; video cable; Owner's manual; connection cable (Except for US); 8MB COMPACTFLASH memory (Except for US); PC Link CD-ROM (Except for US); four LR6 alkaline batteries (Except for US);

•Image size with digital zoom is 640 x 480 pixels.

•The camera also has a lithium battery that powers its built-in clock.

BLOCK DIAGRAM



ADJUSTMENT

■ Preparation

1. PC (IBM Compatible)/OS:Windows 95
2. Link cable.
3. Adjustment program
   1) ADJ778F.EXE (Program)
   2) 0829.ADJ (Data file)
   3) ADJ778K.EXE (Service compensation program)
   4) DT778.EXE (D PCB ass'y check program)
   5) REF.BAY, REF.CB, REF.CR, REF.JPG, REF.Y, REFDEC.CB, REFDEC.CR, REFDEC.Y
      (Saved these programs in CF card when excuting D PCB ass'y check program.Total 8 programs.)
4. AC adaptor or stabilizer.
5. Kenko light box handy 5000 (Modified in order to input DC externally)
6. Filter
   ND filter (ND10, ND20 one each) Lay them together.
   Color temperature converter filter (LA10, LA20 one each) Lay them together.
   These filters are available in camera shops.

1)	ND filter	ND10 (50 × 50)	Cosio parts code 19045436
2)	ND filter	ND20 (50 × 50)	Cosio parts code 19045437
3)	Color temperature coverter filter	LA10 (50 × 50)	Cosio parts code 19045438
4)	Color temperature coverter filter	LA20 (50 × 50)	Cosio parts code 19045439

7. Digital oscilloscope
8. Multimeter
9. Ammeter
10. Frequency counter
11. TV (with video terminal)
12. Video cable
13. Battery (battery operation/battery cover lock)
14. PC link program (for saving user's pictures and checking communication functions)
15. Another QV-7000SX (for IrDA)

Notes:

Normally power is supplied using AC adaptor.
When error occurs, use a voltage regulator, and supply the specified power.
To adjust D PCB ass'y and L PCB ass'y keep the case open.

1. Complete Unit

1-1. Loading ADJ

Set QV-7000SX to “PLAY” mode.

1. Preparation

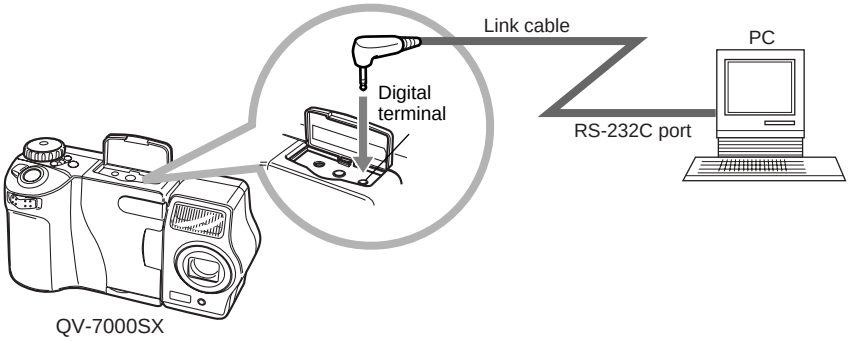
- PC(IBM Compatible)/OS:Windows 95
- Link cable
- Adjustment program: ADJ778F.EXE (program)
  0829.ADJ (data file)

2. Adjustment procedure

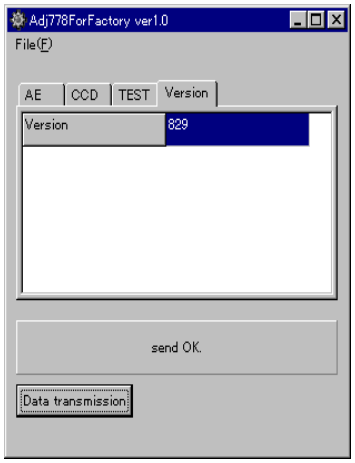
(1) Connect QV-7000SX and PC with link cable.
(2) Execute the adjustment software “ADJ788F” on Windows 95.
(3) Clik “File (F)”.
(4) Clik “Open (O)”.
(5) Search file “0829.ADJ” and double click. (Data input to AE, CCD, TEST, Version).
(6) Click “Data transmission”.
(7) “Send OK” message appears.

3. Notes

(1) When replacing CAM case (CCD) be sure to execute.
(2) Continue with the adjustment (1-2. White balance · Sensitivity adjustment) white balance and (1-3. Scratch compensation) scratch compensation.
(3) When errors occur check CAM case and D PCB ass‘y.



PC display (Example)



1-2. White balance · Sensitivity adjustment

- Set QV-7000SX to “REC” mode.
- Normal Recording mode (▣).
- Light box.

	PROGRAM	Light source (viewer)		Note
		Color temperature (K) light source 1	Light intensisty (cd/m²) light source 2	
No. 1	CCD RGB ADJUST	4400 ± 200		No specified figure for light intensity
No. 2	CCD SENS ADJUST		50 ± 5	No specified figure for color temperature

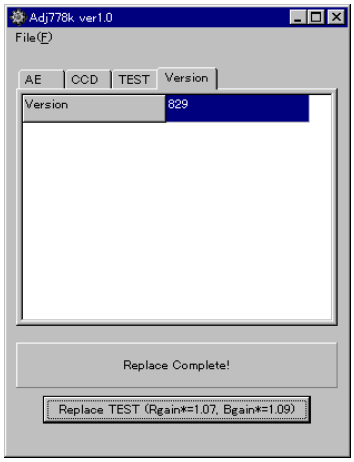
1. Preparation

(1) PC (IBM Compatible)/OS: Windows 95.
(2) Link cable.
(3) Adjustment program ADJ778K.EXE.
(4) Stabilizer.
(5) Viewer (Kenko light box handy 5000) (Modified in order to input DC externally)
(6) Use two ND filter together, one ND10 and one ND20.
Use two color temperature converter filter together, one LA10 and one LA20.

2. Adjustment procedure

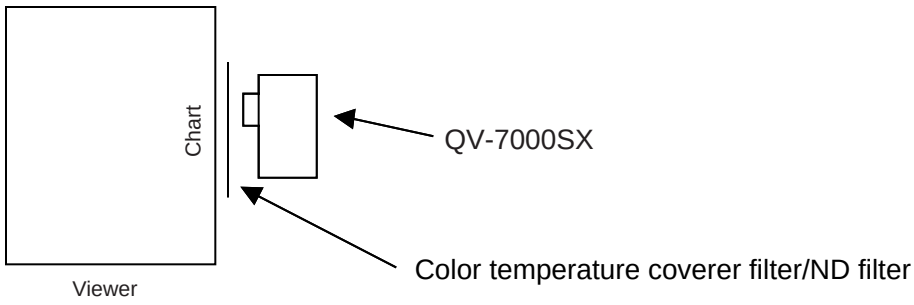
(1) Start test mode MENU2.
✲ Refer to TEST MODE on page 17 and 18.
(2) Select “CCD ADJUST”.
Press +/– to select and SHUTTER button to display “SHUT TO START”
(3) **White balance adjustment.**
Set the color temperature converter filters LA10 and LA20 above the light box.
(4) Set camera lens toward light source then press the shutter button.
(5) When RGB ADJ COMPLETE is displayed, the adjustment of white balance is completed.
(6) **Sensitivity Adjustment.**
Remove two color temperature filters from simplified viewer then set the filter so that center of illuminance face and center of two ND filters are lined up.
(7) Set camera lens toward light source then press the shutter button.
(8) When SENS ADJ COMPLETE is displayed, the adjustment of sensitivity is completed.
Turn off the unit once.
(9) **Compensation program.**
Connect QV-7000SX and PC with a link cable.
Set the camera in PLAY MODE.
(10) Execute compensation program (ADJ778K) on Windows 95.
(11) Click “Replace TEST”.
(12) “Replacement Complete” is displayed.
Turn power off.

3. PC display (Example)



4. Notes

(1) Make sure light box is not directly exposed to light.
(2) Bring light box and filter and camera lens as close as possible.
(3) Operate the above procedure after loading ADJ.
Operate scratch compensation after the procedure above.



1-3. Scratch compensation

- Set QV-7000SX to “REC” mode.
- Normal Recording mode (▣).
- Light box.

	PROGRAM	Light source (viewer)		Note
		Color temperature (K) light source 1	Light intensisty (cd/m^2) light source 2	
No. 3	WHITE NOISE DETECT	4400 ± 200	50 ± 5	No specified figure for color temperature

1. Preparation

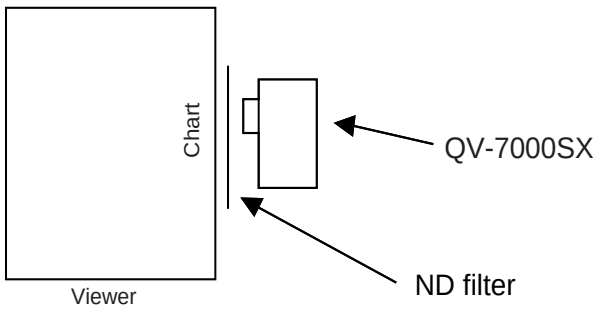
(1) AC adaptor or stabilizer.
(2) Kenko light box handy 5000.
(Modified in order to input DC externally)
(3) Filter.
ND filter one ND10, one ND20.

2. Adjustment procedure

(1) Start test mode MENU2.
✻ Refer to TEST MODE on page 17 and 18.
(2) Select 10. WHITE NOISE DETCT using +/– button.
(3) Set the ND filters ND10 and ND20 above the light box.
(4) Set camera lens toward light source then press the shutter button.
(5) When “SAVE COMPLETE” is displayed, scratch compensation is completed.
(6) Turn power off.

3. Notes

(1) Make sure light box is not directly exposed to light.
(2) Bring light box and filter and camera lens as close as possible.
(3) Operate the above procedure after white balance • sensetivity adjustment.



1-4. Flash operation and recharge operation

- Set QV-7000SX in “REC” mode.
- Normal Recording mode ( ).
- Apply 6.0 ± 0.1 V voltage on DC in jack.

1. Preparation

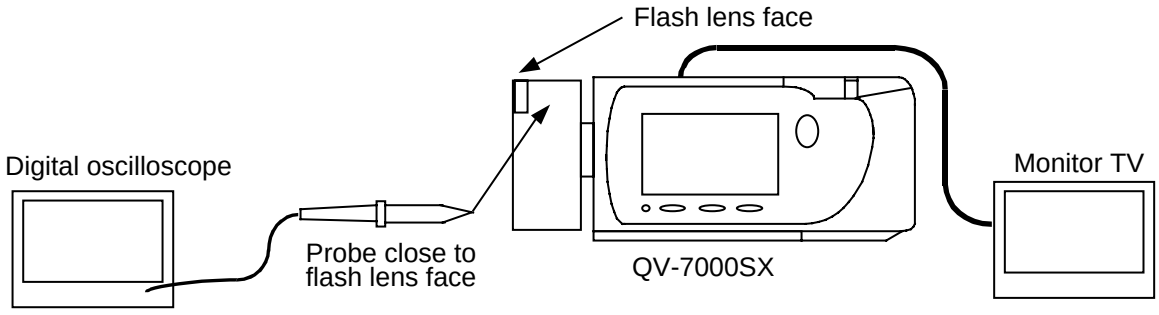
(1) Stabilizer.
(2) Digital oscilloscope.
(3) Ammeter.
(4) TV (With video terminal).
(5) Video cable.

2. Adjustment procedure

(1) Shoot a picture with flash OFF. (Make sure there is no flash)
(2) Shoot a picture with flash ON and make sure it flashes once.
(3) Shoot in red eye reduction mode and make sure it flashes twice.
(4) Connect QV-7000SX and TV with video cable and make sure that the pictures taken in steps (2) and (3) are not whitish, dark or erroneously colored.
(5) Make sure that the charging current is less than 1.3 A.
(6) Monitor the waveform of (1), (2) and (3) on a digital oscilloscope when flash goes on, and make sure there are no errors comparing with the waveforms shown on the next page.

3. Notes

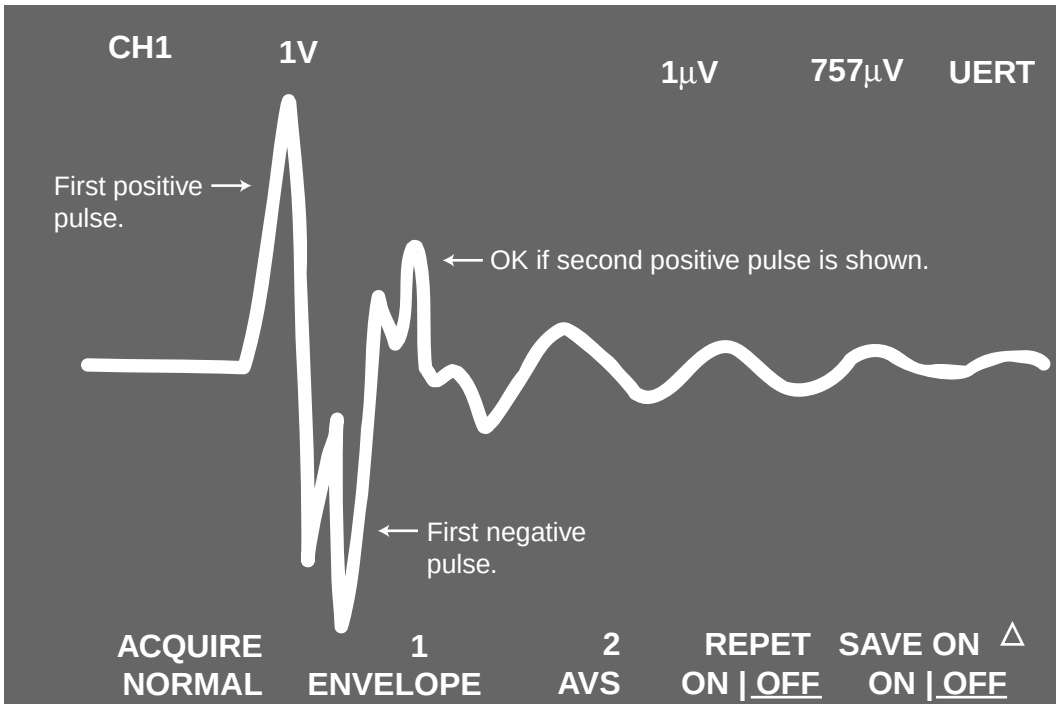
(1) Excuete in a dark room.
(2) Shoot a colorful object as much as possible.



TIME:1.0µ sec/DIV
VOLTS:1V/DIV (AC mode)

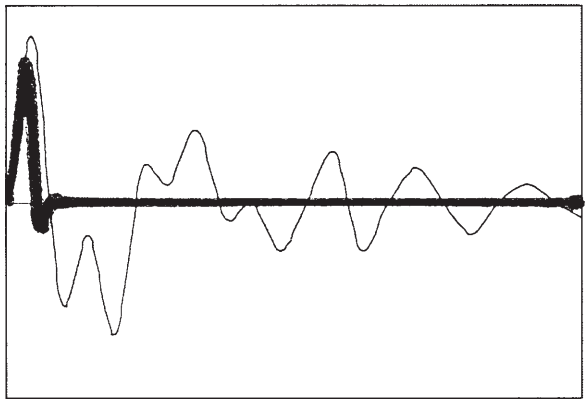
Flash trigger waveform

1. Normal waveform TIME : 1 μ sec/DIV
VOLTS : 1 V/DIV

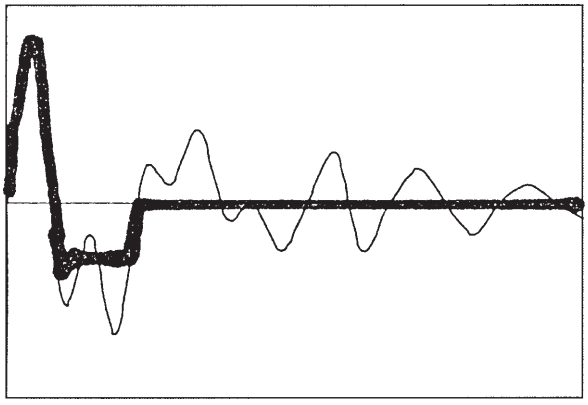


2. NG waveforms when trigger skipping occurs.

(1) When trigger skipping occurs on the first positive pulse.



(2) When trigger skipping occurs on the first negative pulse.



1-5. Current consumption

• Set QV-7000SX to “PLAY” mode.

1. Preparation

(1) Voltage regulator.
(2) Ammeter.

2. Adjustment procedure

(1) Current consumption (DC in = 6.0 ± 0.1 [V])
  • Make sure that current consumption is less than 550 mA in PLAY mode.
  • Make sure that current consumption is less than 800 mA in REC mode.
  (Flash charge current is not included)
(2) Lower the voltage from 6 V as shown below then make sure the battery warning indicator changes.

DC in = 5.0 ± 0.05 [V] (one indicator is off) 

DC in = 4.65 ± 0.05 [V] (two indicators are off) 

1-6. Operation check

1. Preparation

(1) Batteries.
(2) AC adaptor.
(3) PC (IBM compatible)/OS:Windows 95.
(4) Link cable.
(5) PC link program.
(6) TV (with video teminal).
(7) Video cable.
(8) QV-7000SX (for checking IrDA).

2. Adjustment procedure

Perform the fallowing operations and checkings.

(1) Battery operation, AC adaptor operation.
(2) Switch operation.
(3) Cover open/close operation, CF insersion/eject operation, battery cover open/close operation.
(4) Standard/Macro switch, lens rotation, AE operation , AF operation zoom operation.
(5) Video output, digital communication, IrDA communication.
(6) Dust and scratches on lens.

3. Notes

(1) Make sure Video out setting are appropriate to your country.
(i.e. Japan=NTSC, England = PAL)

2. D-PCB Assy

2-1. Operation check

1. Preparation

- PC(IBM Compatible)/OS:Windows 95
- Link cable
- Program
  DT778.EXE (D PCB ass'y check program)
  REF.LZH (Extract and save in CF card to execute D PCB ass'y check program)
- AC adaptor or voltage regulator
- TV (with video terminal)
- Video cable

2. Adjustment procedure

(1) Connect QV-7000SX and PC with link cable.

(2) Start up adjustment program DT778 on MS-DOS.

(3) Check the items listed below.
- Serial communication is OK.
- Check ROM version.
- DRAM is OK.
- CF is OK.
- Voltage detection is OK (Displays High)
  (VCC1-3 voltage high 6.0 ± 0.1 V, middle 4.5 ± 0.1V, low 4.0 ± 0.1 V)
- Check if each mode is OK.
  1: REC/PLAY mode
  2: Video jack available
  3: AC adaptor jack available.
- Check JPEG compression extension
  Error mode
  1: Color processor error
  2: JPEG Encode error
  3: JPEG Decode error
  (When error occures replace D PCB ass'y)
- Check each mode by turning dial of switch unit.
  (Turn dial 1 step at a time, then press space key to check the mode. There are 10 modes.)
- Make sure each key works.
  (Since key scanning speed is slow, key entry may not be detected. In such a case, push the key again.)
- Make sure LED goes on.
- ON/OFF operation of TFT-LCD display.
- Check clock operation.
- Wake up function of power source.
  (Turns off and on automatically)

(4) After completing D PCB ass'y check program, sets the video out for each country.
(ie: JAPAN = NTSC, ENGLAND = PAL)

(5) Connect QV-7000SX and TV with video cable, and check the picture taken.

3. PC display (Example, subject to change)

```
＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊
 DT778  (KX-778 D PCB checking software) for DOSV
－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－
 Usage :dt778 [–-option]
 option : ccd test

 Corresponding model : QV-7000SX (KX-778)
Ver1.9                                98/08/07
＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊＊
 Exits from program by <ESC> button
 Serial transportation check                    OK
 ROM version code check                         code = 01b18904
                                                for KX-778   Ver.98090401
 DRAM check                                     OK
 Compact Flash Memory Check                     OK
 Battery voltage detection check                Level = HIGH
 MODE detection check                           PLAY MODE
                                                VIDEO OUT plug not inserted
                                                AC adaptor plug inserted
                                                Lens not reversed
 EEPROM Check                                   OK
 CP2 JPEG Check                                 OK
 Dial check    (10times)
 < Detect dial position by SPACE key >          CUSTOM
 < Detect dial position by SPACE key >          TIMER
 < Detect dial position by SPACE key >          NIGHT
 < Detect dial position by SPACE key >          SPORTS
 < Detect dial position by SPACE key >          NORMAL
 < Detect dial position by SPACE key >          MOVIE
 < Detect dial position by SPACE key >          PANORAMA
 < Detect dial position by SPACE key >          TITLE
 < Detect dial position by SPACE key >          MONO TONE
 < Detect dial position by SPACE key >          SEPIA
 Button Check
 Press SHUTTER button (Interrupted by ESC button)
                                                OK
 Press SHUTTER button half way (Interrupted by ESC button)
                                                OK
 Press + button (Interrupted by ESC button)
                                                OK
 Press - button (Interrupted by ESC button)
                                                OK
 Press MENU button (Interrupted by ESC button)
                                                OK
 Press TELE button (Interrupted by ESC button)
                                                OK
 Press WIDE button (Interrupted by ESC button)
                                                OK
 Press DISP button (Interrupted by ESC button)
                                                OK
 Press SELF button (Interrupted by ESC button)
                                                OK
 Press AF button (Interrupted by ESC button)
                                                OK
 Press FLASH button (Interrupted by ESC button)
                                                OK
 LED control
 < Function indicator turns on in red by SPACE key>
 < Function indicator turns on in orange by SPACE key>
 < Function indicator turns on in green by SPACE key>
 < Function indicator turns off by SPACE key>
 LCD control
 < Backlight turns off by SPACE key >
 < Backlight turns on by SPACE key>
 Seting Time
 PC : 1998/10/07 19:22:23
 QV : 1998/10/07 19:22:23
 Timer Check
 < Automatically restart in 5 sec. >
 Functions correctly
```

2-2. Clock oscillation check

- Turn power off
- Room temperature should be 25 ± 10 °C.

1. Preparation

Pedometer or frequency counter or quartz timer.

2. Adjustment procedure

Execute one of check from the followings.

(1) Pedometer: within 62 ppm.
(2) Frequency counter check point CP670 signal pad; 32.767±0.002 [KHz].
(3) After setting time turn power off. 30 minutes later check the time.

3. L-PCB Assy

3-1. VCC21, VEE9 Voltage adjustment

1. Preparation

- AC adaptor or voltage regulator
- Multimeter

2. Adjustment procedure

(1) Adjust VR120 so that VCC21 (CP121) is 21.0 ± 0.3 V.
(2) Adjust VR130 so that VEE9 (CP133) is –9.0 ± 0.2V.

3. Notes

When not able to adjust using AC adaptor, use voltage regulator and supply power to be VCC1-1 (CP149)=5.0 ± 0.05 V.

3-2. VCC3, VCC5, VCC5-1, VCC5-2, VCC3-5, EVCC3 Voltage check

1. Preparation

- AC adaptor or voltage regulator
- Multimeter

2. Adjustment procedure

Make sure

VCC3	(CP112)	=	3.3 + 0.2/–0.1	[V]
VCC3-5	(CP147)	=	3.3 + 0.2/–0.1	[V]
VCC5	(CP142)	=	5.5 + 0.2	[V]
VCC5-1	(CP137)	=	5.0 + 0.15	[V]
VCC5-2	(CP139)	=	5.0 + 0.15	[V]
EVCC3	(CP115)	=	3.3 + 0.1	[V]

3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.

3-3. VCC2 adjustment and VCC13, VCC7, VEE2 Voltage check

1. Preparation

- AC adaptor or voltage regulator
- Multimeter

2. Adjustment procedure

Adjust VR151 so that VCC2 (CP172) = 5.0 ± 0.02 V.
Make sure

VCC7	=	6.8 ~ 8.6	[V]
VCC13	=	11.4 ~ 14.1	[V]
VEE2	=	–11.0 ~ –16.5	[V]

3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.

3-4. VCO free run frequency adjustment

Room temperature should be 20 ± 10 ºC

1. Preparation

- AC adaptor or voltage regulator
- Frequency counter

2. Adjustment procedure

(1) Connect CP733 (SYF) and CP700 (GND).
(2) Monitor CP704 (HDB) with frequency counter and adjust VR755 so that frequency becomes 15.734 ± 0.1 KHz.
(3) After completing adjustment, disconnect CP7033 (SYF) and CP700 (GND).

3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.

3-5. BL drive voltage adjustment

1. Preparation

- AC adaptor or voltage regulator
- Multimeter

2. Adjustment procedure

Make sure that CP910 (BL-VCC) is within 5.4 ± 0.2V.

3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.

3-6. VCOM AC adjustment and VCOM DC coarse adjustment

1. Preparation

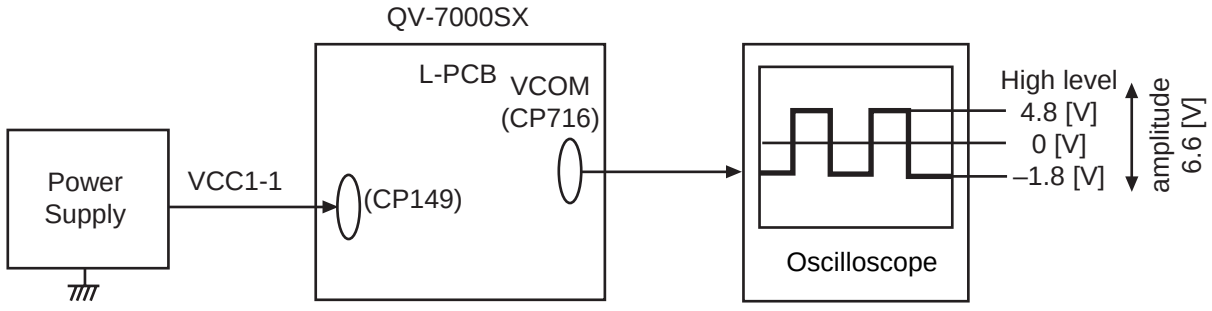
- AC adaptor or voltage regulator
- Digital oscilloscope

2. Adjustment procedure

(1) Make sure amplitude of VCOM output (CP176) is 6.6 ± 0.3 V.
(2) Adjust VR320 so that maximum VCOM output (CP716) will be 4.8 ± 0.2 V.

3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.



3-7. Brightness voltage setting and contrast adjustment

1. Preparation

- AC adaptor or voltage regulator
- Digital oscilloscope

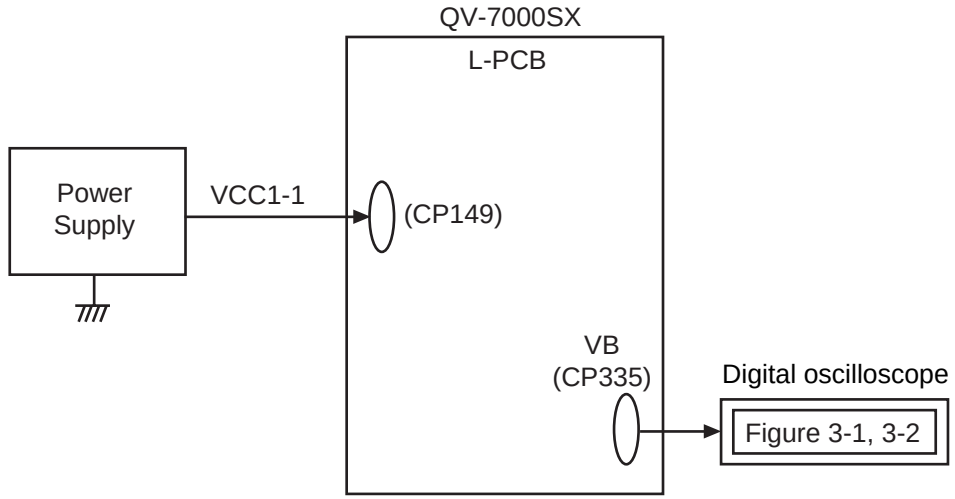
2. Adjustment procedure

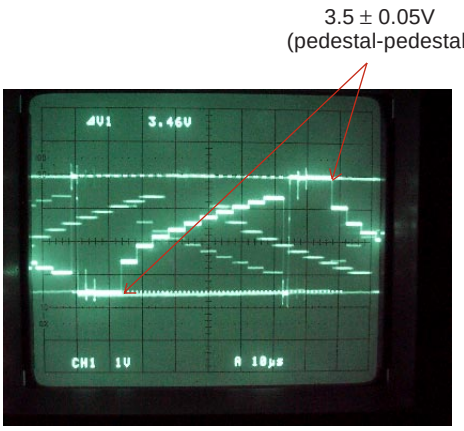
(1) Start up Test mode Menu1.
(2) Select GRAY SCALE (10 step).
(3) Trigger VB waveform (CP335) by FRP (CP346) signal to adjust as noted below.
(4) Adjust RGB-AMP VR (VR340) so that pedestal-pedestal voltage of VB(CP335) signal is 3.5 ± 0.05 V.
(5) Adjust contrast VR (VR344) so that contrast terminal voltage (CP305) is 3.0 ± 0.05 V temporary.
(6) Adjust Bright VR (VR381) so that potential between VB (CP335) signal's pedestal and 3 step is 2.20 ± 0.05 V.
(7) Adjust contrast VR (VR344) so that potential between VB (CP335) signal's pedestal and 10 step is 2.85 ± 0.05 V.

* Make sure that waveforms are not distorted.

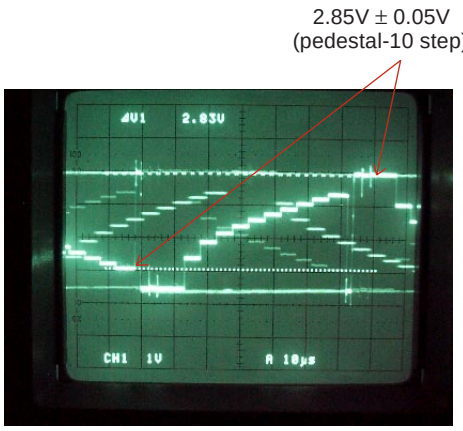
3. Notes

When unable to adjust using AC adaptor, use voltage regulator and supply power to be VCC-1-1 (CP149) = 5.0 ± 0.05 V.





3-1



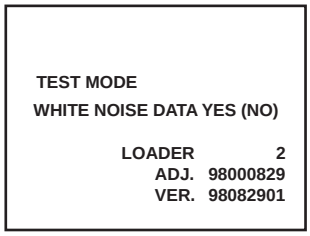
3-2

4. TEST MODE

4-1. TEST MODE

(1) Turn POWER on while pressing MENU key and DISP button simultaneously.
(2) TEST MODE screen is displayed.

Display



(3) When scratch compensation is NOT complete, WHITE NOISE DATA NO appears on the display.
(4) If scratch compensation is COMPLETE, WHITE NOISE DATA YES appears on it.
(5) At the lower right corner, Loader, ADJ and Program versions are displayed.
ADJ: When ADJ is broken, 2222222222 will be displayed.
When CCD is not adjusted, '98 will not be displayed. (i.e. only 829 appears)

4-2. MENU1

(1) Press MENU button and FLASH button at the same time while in TEST MODE display.
(2) MENU1 is displayed.
1. INIT. SETTING NTSC
2. INIT. SETTING PAL
3. GRAY SCALE(10step)
4. BLACK
5. 50% GRAY
6. WHITE
7. CROSS HATCH
8. COLOR BAR

(3) Select using +/– button. Choose by pressing SHUTTER button.

1. MENU1-1, 2
Set at factory.
On confirmation screen SHUTTER will start the settings.
(Will not delete pictures in Flash memory)

2. MENU1-3
Displays 10 step of gray scale.
Light intensity values are 16, 38 60, 82, 104, 126, 148, 170, 192, 214, 235.

3. MENU1-4
Black display.

4. MENU1-5
50% gray display.

5. MENU1-6
White display

6. MENU1-7
32 × 32 pixel grid pattern on black, or RED square at REC Thru (320 × 216) or Yellow square at PLAY MODE (360 × 240) or 1 PIXEL mark is displayed in the center.

7. MENU1-8
Display color bar.

4-3. MENU2

CAUTION : Do no execute operations of MENU2 other than noted in 3. Adjustment. Program data maybe corrupted and will be unable to use.

(1) In TEST MODE display, double click AF key then MENU button and FLASH button at the same time.

(2) MENU2 is displayed as shown below.
page 1
1. CCD ADJUST
2. BATT. TEST
3. REC INFO.
4. SELF COPY
5. CAMERA UPDATE
6. NO COMP CAPT
7. IR TEST MASTER
8. IR TEST SLAVE

page 2
9. CP2 JPEG TEST
10. WHITE NOISE DETECT
11. BAYER CAPTURE

(3) Select using +/– key. Confirm by pressing SHUTTER button.

1. MENU2-1
Execute CCD color solid adjustment, then record it on ADJ of EEPROM.
Press shutter button by adjusting the light amount using specified filters in specified viewer.
When setting mark is displayed, it is completed.
Set QV-7000SX to REC mode Rotary switch to Normal.
Hold back any other key operation.

2. MENU2-2
Battery life measurement function.
When SHUTTER button is pressed, it will shoot pictures intervally.

3. MENU2-3
Displays FOCUS/ iris/Shutter speed

4. MENU2-4
Connect QV-700SX with each other with cable and copy program codes. The camera operating this menu will be the master camera, and by sending its ROM data it will update the receiving camera's 8 Mbyte FLASH MEMORY. Connect another QV-7000SX and turn on power, then transmission will start.

5. MENU2-5
Overwrites camera program domain. It reads a file mane Rom.bin from CF, and writes its binary image into the Flash memory 0X1000.

6. MENU2-6
Saves without compression. Disabled by turning power off.

7. MENU2-7,8
Test the IrDA communication. Master mode is sending 1 letter repeatedly and receiving the same letter back .
Slave mode is sending back when the letter it received.

8. MENU2-9
Test CP2, JPEG. Keep the right data file of ref.bay, ref.y, ref.cb, ref.cr, refdec.y, refdec.cb, refdec.cr, ref.jpg beforehand in CF.

9. MENU2-10
Detects CCD's white scratch, and stores it in EEPROM. Set to Normal.

10. MENU2-11
Saves Bayer data from CCD as it is.

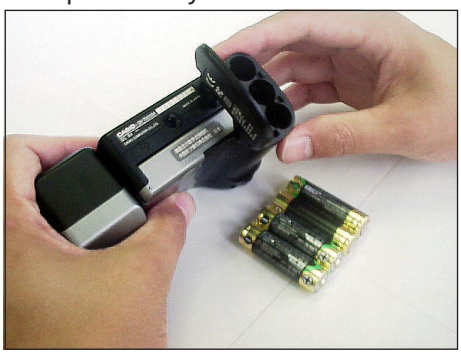
DISASSEMBLY

1. Main

1. Remove CF card.

2. Unlock battery cover.

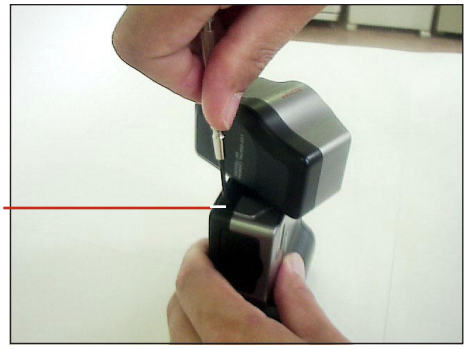
3. Open battery cover and remove batteries.



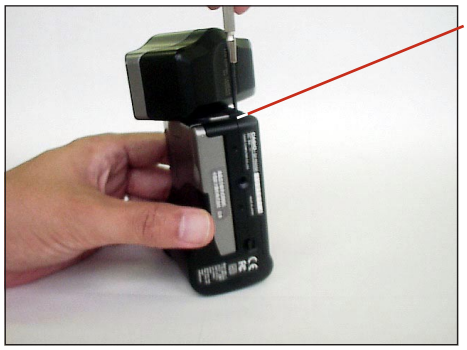
4. Unscrew tow screws (S3)in the battery holder.

5. Unscrew two screws (S3) on the bottom.

6. Rotate the CAM case and unserew one screw (S3) on the side.

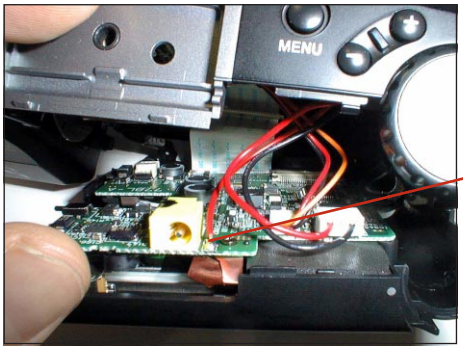


7. Rotate the CAM case to the other side and unscrew one screw (S3) on the side.

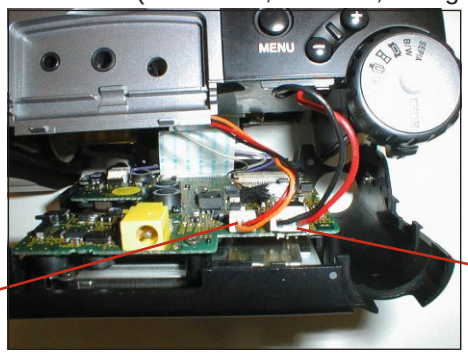


8. Separate the upper case and lower case. (Easy if from CAM case side.) CN cover will be remored.

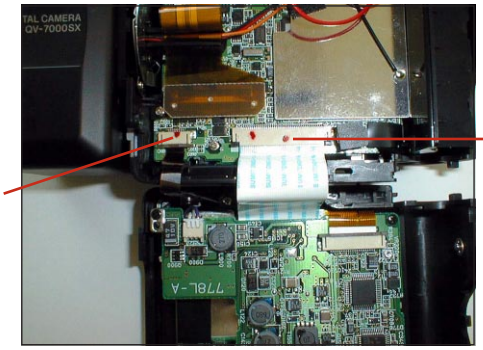
9. Desolder the red wire which comes from the switch unit.



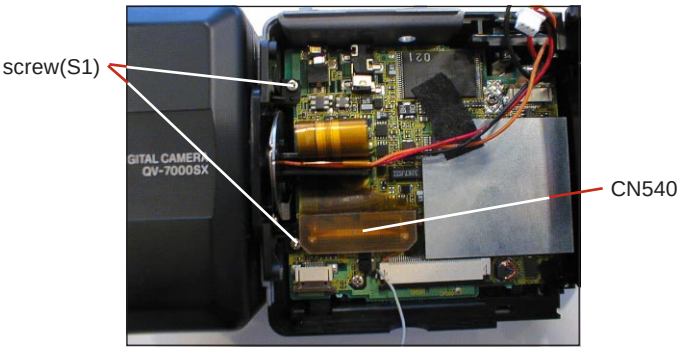
10. Remove CN150 (red wire, black wire) and CN160 (black wire, red wire, orange wire)



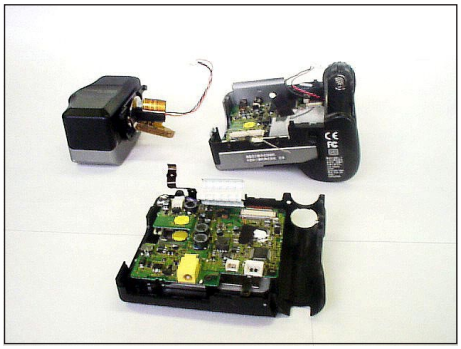
11. Remove CN800 and CN580.



12. Unscrew two screws (S1) fixing CAM case and remove CN540 then take CAM case out.



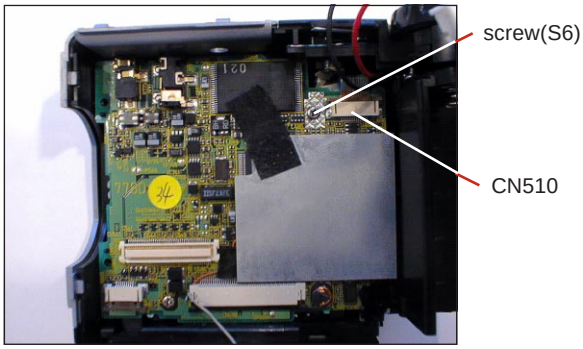
13. CAM case block, lower case block, upper case block separated.



2. Lower case

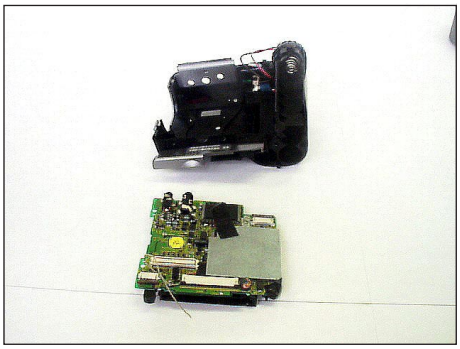
1. Remove battery cover by turning it upward to the right.

2. Unscrew screws (S6) and CN510 on D PCB ass'y



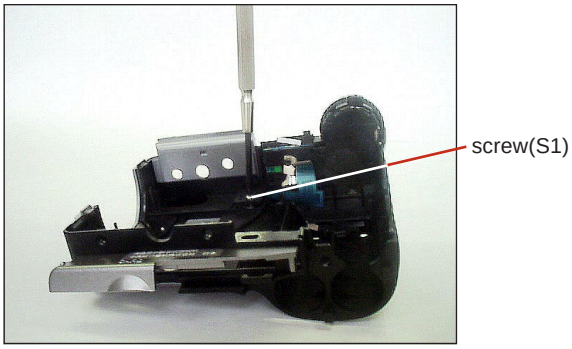
3. Open CF cover and make sure not to damage the detect switch. By pressing the CF card eject knob with a precision screw driver remove D PCB ass'y.

4. Lower case and D PCB ass'y separated.

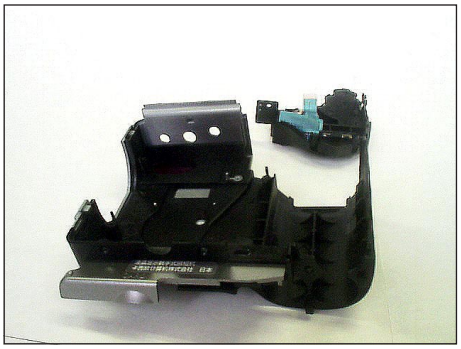


5. Lower case and battery holder separated.

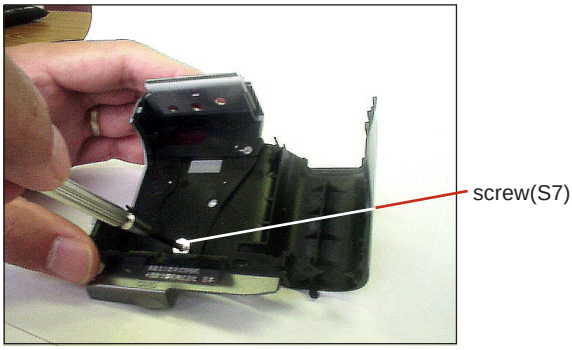
6. Unscrew one screw (S1) on switch unit.



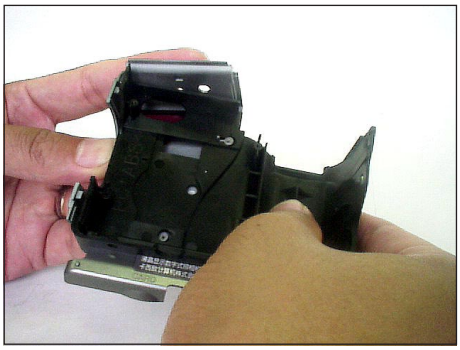
7. Lower case and switch case separated.



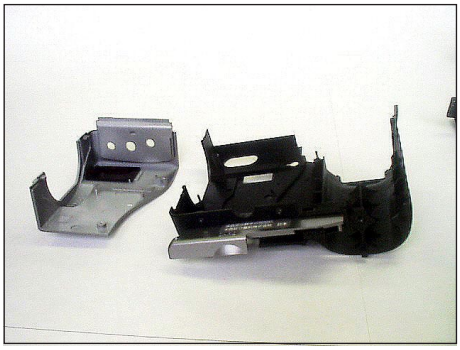
8. Unscrew one screw (S7) on lower case.



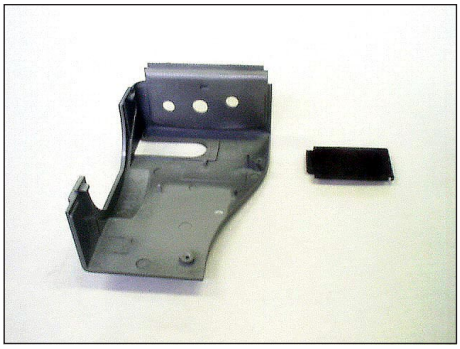
9. Remove lower case cover from lower case.



10. Lower case cover and lower case separated.

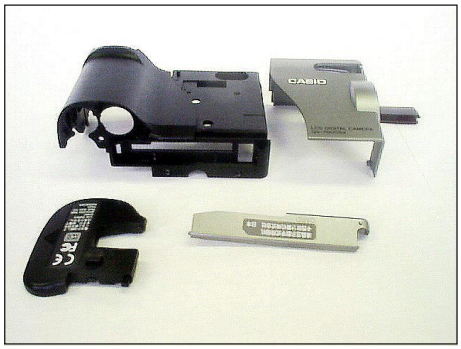


11. Lower case cover and IR cover separated.



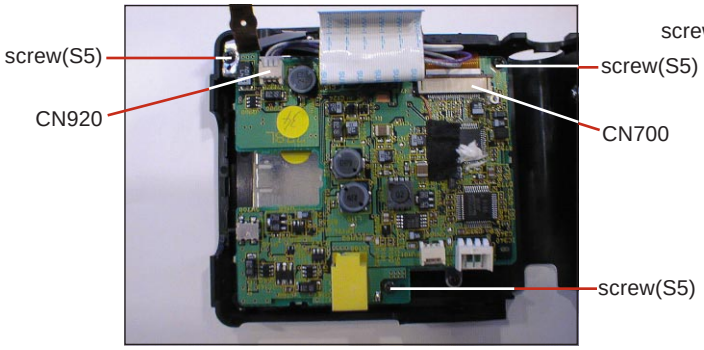
12. Remove CF cover by bending it from lower case.

13. Lower case, lower case cover, IR cover battery cover, CF cover separated.

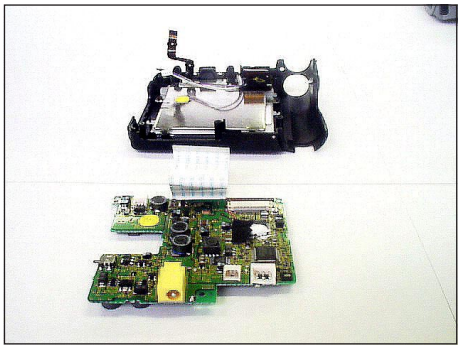


3. Upper case

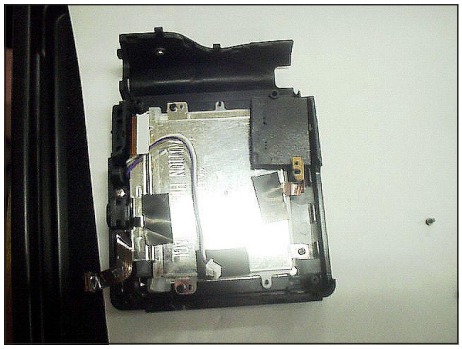
1. Unscrew three screws (S5) on L PCB ass'y.
   Remove CN920 and CN700.



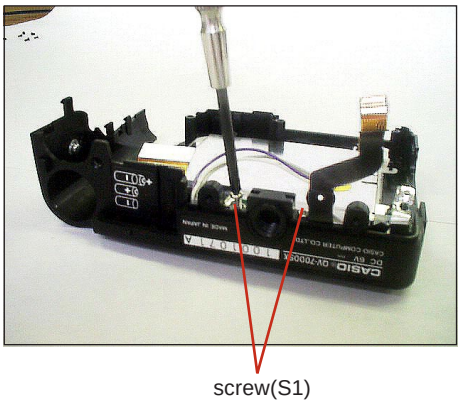
2. Upper case and L PCB ass'y separated.



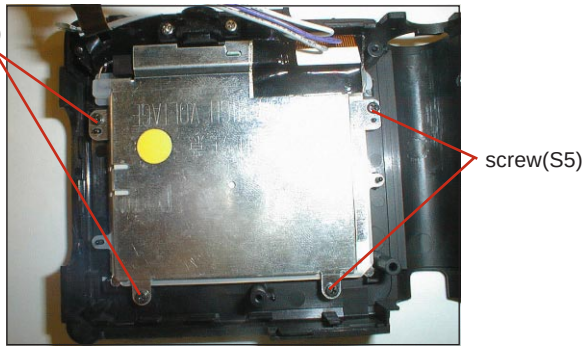
3. Remove cushion.



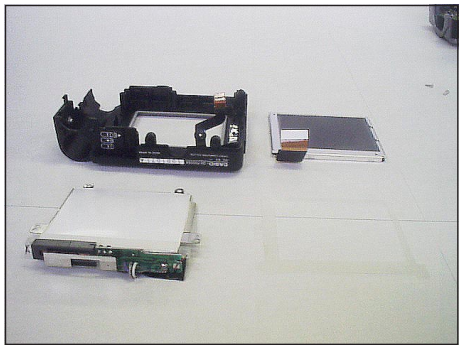
4. Unscrew two screw (S1) in the tripod screw.



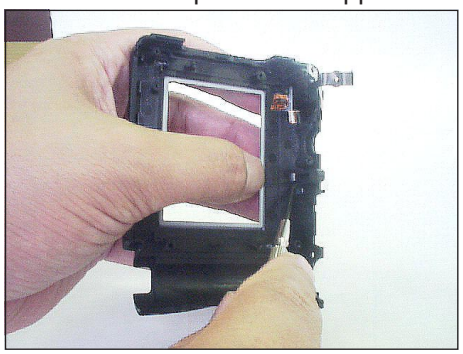
5. Unscrew four screws (S5) on BL ass'y.



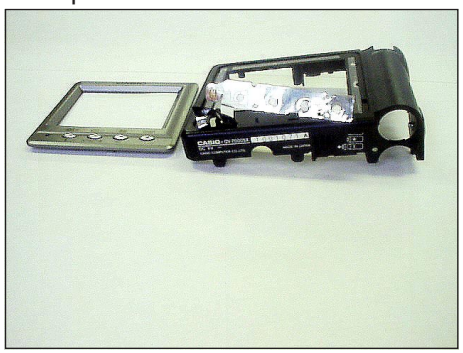
6. Upper case, TFT-LCD module, BL ass'y separated.



7. Remove DP panel from upper case by pushing.

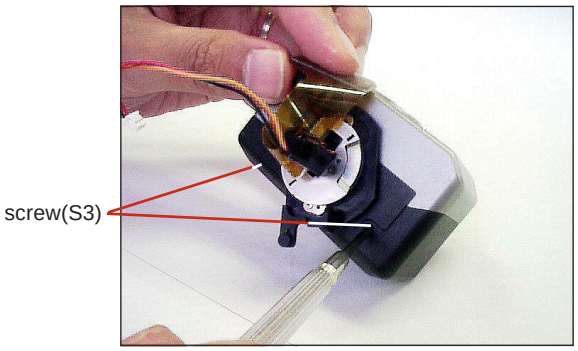


8. DP panel, sheet switch ass'y, upper case separated.



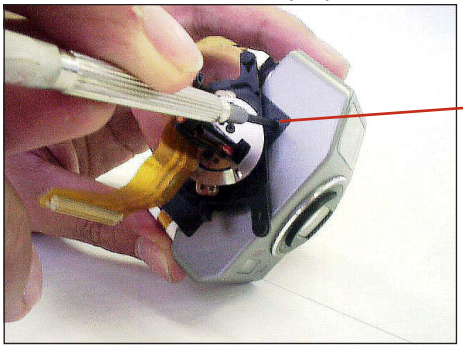
4. CAM case

1. Remove two screws (S3) on CAM case.

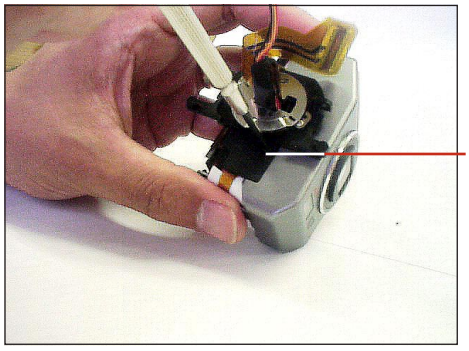


2. Remove upper case by pressing the upper part of CAM case ass'y

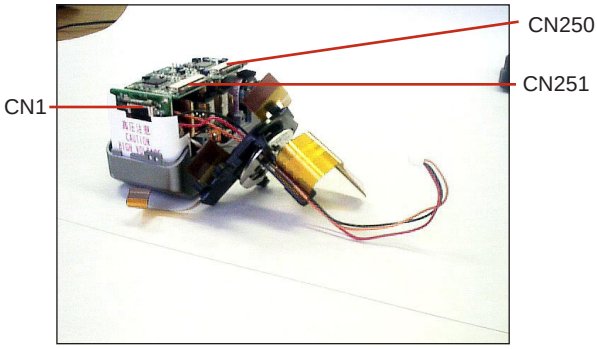
3. Unscrew one screw (S3) on L case ass'y.



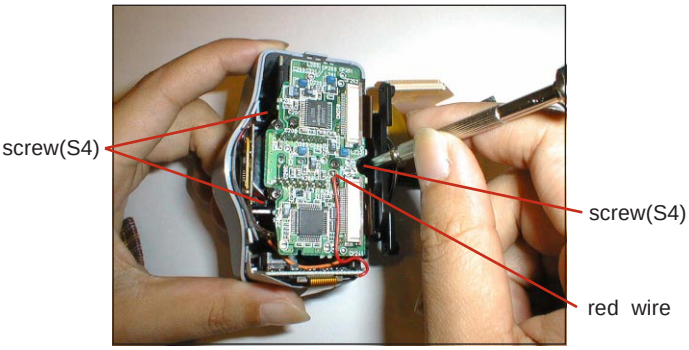
4. Rotate L case ass'y and unscrew the other screw (S3).



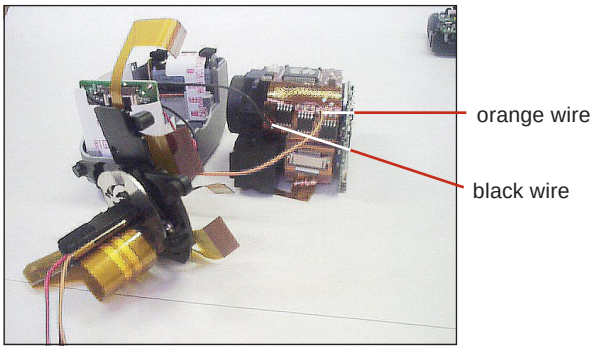
5. Remove CN1, CN250, CN251.



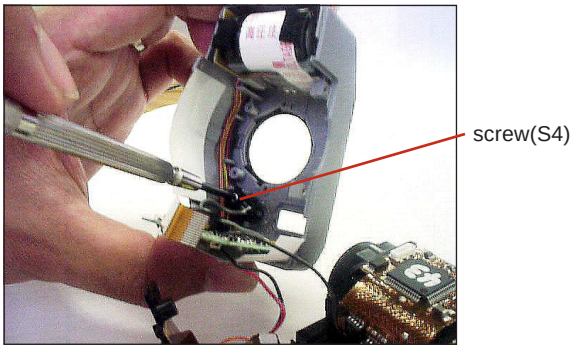
6. Remove three screws (S4) and desolder red wire on CL unit.



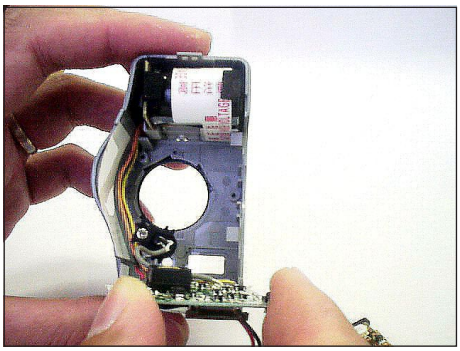
7. Desolder black wire and orange wire on CL unit.



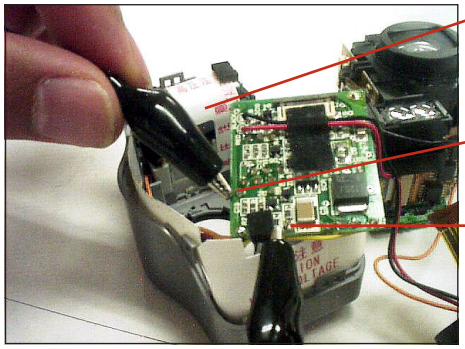
8. Unscrew (S4) on sensor.

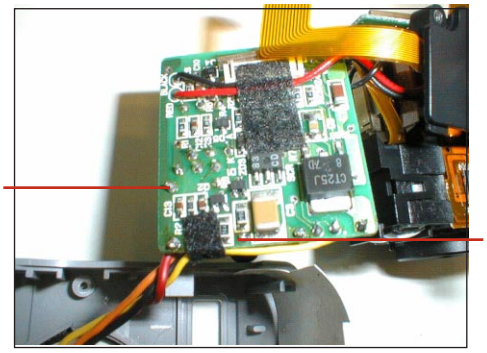


9. Remove sensor PCB ass'y.
When assembling, make sure the wires are inside the ribs.



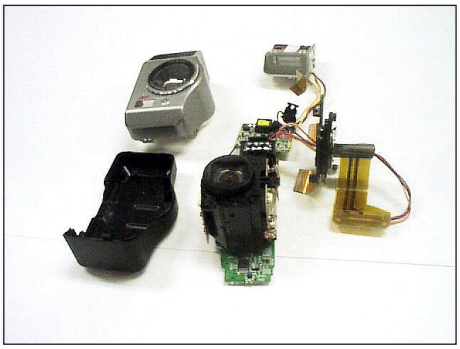
10. Discharge the flash capacitor by using a discharge tool.



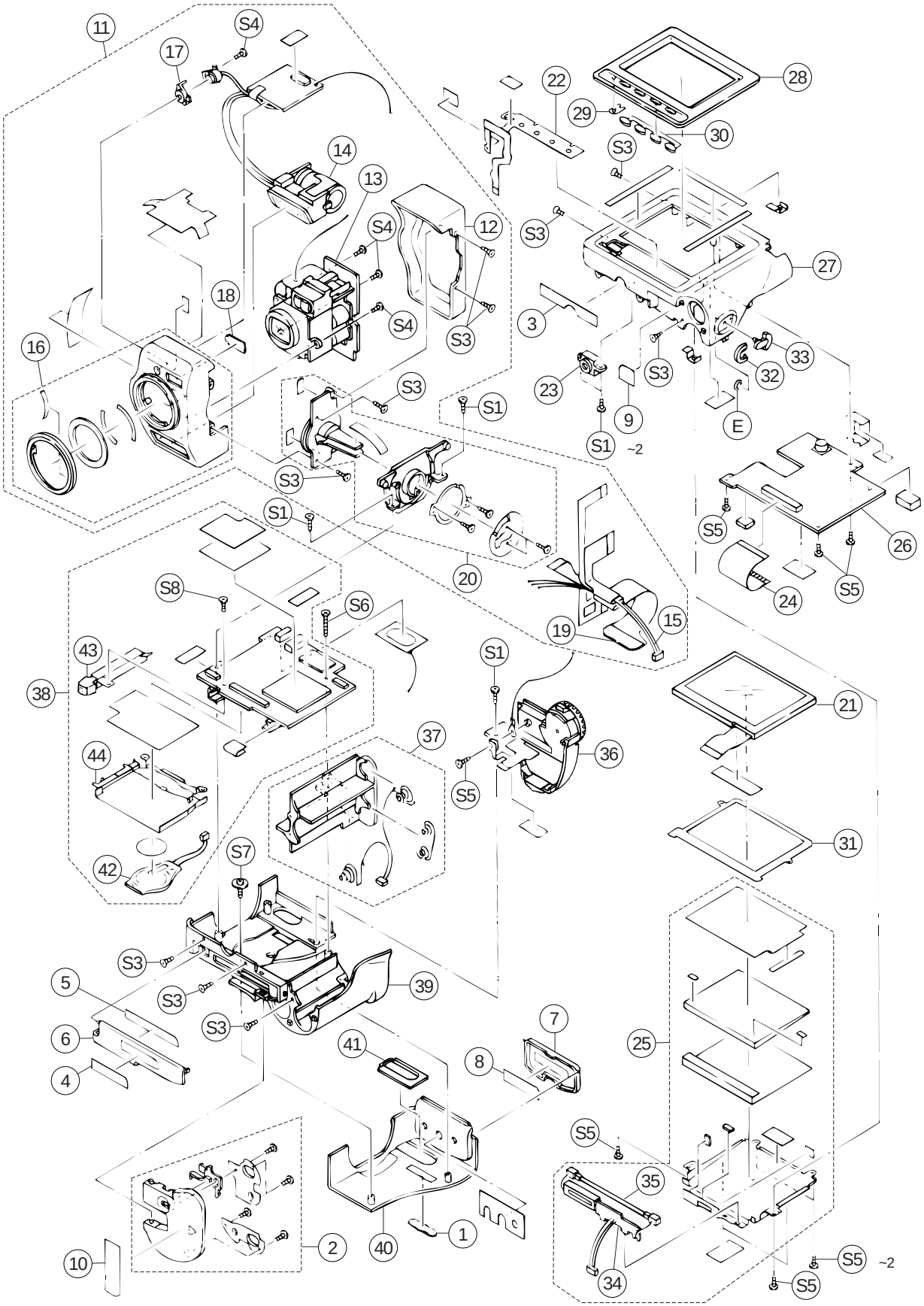


11. Remove flash unit by pressing

12. Flash unit, CL unit, L case ass'y CAM case separated.



EXPLODED VIEW



PARTS PRICE LIST

DIGITAL PCB ASSY

N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
		Ics						
	IC560	20126033	LSI	MB81V18165B50LPFTN	Common	1	BT	C
	IC561	20126033	LSI	MB81V18165B50LPFTN	Common	1	BT	C
N	IC700	20126087	LSI	PC87109VBE	Common	1	BP	C
N	IC550	20126088	LSI	MBM29LV800TA10-021	Common	1	BX	C
	IC415	21053633	IC/CMOS	TC7S00FU-TE85L	Common	1	AD	C
	IC410	21055215	IC/CMOS	TC7W74FU(TE12L)	Common	1	AE	C
	IC750	21055712	IC	TC7S04FU(TE85L)	Common	1	AD	C
	IC416	21056244	IC	TC7S32FU(TE85L)	Common	1	AC	C
	IC417	21056244	IC	TC7S32FU(TE85L)	Common	1	AC	C
	IC670	21056399	IC	RS5C316A-E2	Common	1	AP	C
	IC458	21056470	IC	LM4041CIM3X-1.2	Common	1	AL	C
	IC420	21056471	IC	MSM82C55A-2GS-2K	Common	1	BC	C
	IC414	21056472	IC	TC74AC00FT(EL)	Common	1	AF	C
	IC530	21056473	IC	TC7WH125FU(TE12L)	Common	1	AF	C
	IC531	21056473	IC	TC7WH125FU(TE12L)	Common	1	AF	C
	IC701	21056473	IC	TC7WH125FU(TE12L)	Common	1	AF	C
	IC691	21056479	IC	RN5RL33AA-TR	Common	1	AC	C
	IC400	21056486	IC	S-80835ANNP-EDZ-T2	Common	1	AC	C
N	IC427	21056487	IC	S-80843ANNP-ED7-T2	Common	1	AC	C
	IC426	21056488	IC	S-80847ANNP-EJB-T2	Common	1	AC	C
N	IC428	21056489	IC	S-80839ANNP-ED3-T2	Common	1	AC	C
	IC770	21056490	IC	TK15405MTL	Common	1	AH	C
	IC460	21056492	IC	PST9330UR	Common	1	AC	C
N	IC418	21056495	IC	TC7SL08FU(TE85L)	Common	1	AD	C
N	IC450	21056526	LSI	DCAM101E-T	Common	1	DH	C
	IC412	21144676	IC/CMOS	TC7W04FU-TE12L	Common	1	AD	C
N	IC710	21145857	IC	HSDL-1100#008	Common	1	BK	C
N	IC690	21145861	IC	AD7823YRM-REEL	Common	1	AX	C
	IC760	22540550	IC/CMOS	TC7W66FU-TE12L	Common	1	AD	C
	IC761	22540550	IC/CMOS	TC7W66FU-TE12L	Common	1	AD	C
N	IC440	71008365	IC	TC75S51F-(TE85L)	Common	1	AF	C
		SWITCH						
	SW650	34122083	SWITCH	MSS-26	Common	1	AD	C
		JACKS						
	JK770	30251937	JACK	HSJ1636-011020	Common	1	AE	C
	JK750	35018197	JACK/MINI	HSJ1169-019010	Common	1	AF	C
		TRANSISTORS						
	Q400	22501579	TRANSISTOR/CHIP	2SA1774TLR	Common	1	AA	B
N	Q660	22510930	TRANSISTOR/CHIP	2SB1073-R(TX)	Common	1	AB	B
	Q750	22540448	FET/CHIP	2SK1580-T1	Common	1	AC	B
	Q405	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q661	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q671	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q770	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q800	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q801	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q446	22592744	TRANSISTOR/DIGITAL	DTA143EETL	Common	1	AA	B
	Q440	22592745	TRANSISTOR/DIGITAL	DTC143EETL	Common	1	AA	B
	Q441	22592745	TRANSISTOR/DIGITAL	DTC143EETL	Common	1	AA	B
	Q442	22592745	TRANSISTOR/DIGITAL	DTC143EETL	Common	1	AA	B
	Q443	22592745	TRANSISTOR/DIGITAL	DTC143EETL	Common	1	AA	B
	Q445	22592745	TRANSISTOR/DIGITAL	DTC143EETL	Common	1	AA	B
	Q444	27958150	FET/CHIP	2SK2035(TE85L)	Common	1	AA	B
N	Q670	71015791	TRANSISTOR/CHIP	DTA144EETL	Common	1	AA	B
N	Q672	71015791	TRANSISTOR/CHIP	DTA144EETL	Common	1	AA	B

N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
		DIODES						
	D691	23900777	DIODE/CHIP	IMN10T-108	Common	1	AB	C
	D670	23901183	DIODE/CHIP	MA142WK-(TX)	Common	1	AA	C
	D750	23901379	DIODE/SHOTTKY	MA729-(TX)	Common	1	AB	C
	D751	23901379	DIODE/SHOTTKY	MA729-(TX)	Common	1	AB	C
N	D800	27752079	DIODE/CHIP/MODULE	DA227-TL	Common	1	AA	C
N	D801	27752079	DIODE/CHIP/MODULE	DA227-TL	Common	1	AA	C
		OSCILLATORS						
	H450	25902722	OSILLATOR	SPT2A-32KHZ	Common	1	AG	C
	H670	25902722	OSILLATOR	SPT2A-32KHZ	Common	1	AG	C
	H454	25902744	OSILLATOR	CX-51F-20.0M	Common	1	AP	C
	H452	25902745	OSILLATOR	CX-51F-27.0M	Common	1	AP	C
N	H700	25902749	OSILLATOR	FXO-31FL-48.0M	Common	1	AV	C

LINEAR PCB ASSY

		Ics						
N	IC730	20125983	LSI	CM7018L3-T4N	Common	1	AY	C
	IC145	21053689	IC/MOS	RN5RG50AA-TR	Common	1	AE	C
	IC180	21054501	IC/MOS	RN5RL30AA-TR	Common	1	AD	C
	IC140	21056478	IC	RH5RH553B-T1	Common	1	AK	C
	IC115	21056479	IC	RN5RL33AA-TR	Common	1	AC	C
	IC110	21056480	IC	S-8520B33MC-ARS-T2	Common	1	AL	C
	IC147	21056480	IC	S-8520B33MC-ARS-T2	Common	1	AL	C
	IC130	21145607	IC	TK11830MTL	Common	1	AL	C
	IC150	21145800	IC	MB3800PFV-G-BND-EF	Common	1	AP	C
	IC390	21145805	IC	NJM3414AV-TE1	Common	1	AI	C
	IC120	21145842	IC	S-8327E50MC-EKE-T2	Common	1	AI	C
	IC340	21145846	IC	IR3Y26A1	Common	1	BH	C
	IC137	21145849	IC	TK11250BMCL	Common	1	AE	C
	IC900	21145858	IC	S-8327B54MC-ESI-T2	Common	1	AH	C
		SWITCH						
	SW700	34122083	SWITCH	MSS-26	Common	1	AD	C
		JACK						
	JK100	35016755	JACK/POWER	HEC3600-010120	Common	1	AD	C
		TRANSISTORS						
	Q131	22501579	TRANSISTOR/CHIP	2SA1774TLR	Common	1	AA	B
	Q120	22510930	TRANSISTOR/CHIP	2SB1073-R(TX)	Common	1	AB	B
	Q146	22510930	TRANSISTOR/CHIP	2SB1073-R(TX)	Common	1	AB	B
	Q100	22520637	TRANSISTOR/CHIP	2SC4081-T106R	Common	1	AA	B
	Q121	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q130	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q141	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q145	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q152	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q340	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
	Q901	22592715	TRANSISTOR/DIGITAL	DTC144EETL	Common	1	AA	B
N	Q122	22592758	TRANSISTOR/CHIP	2SD2150-T100S	Common	1	AB	B
N	Q155	22592758	TRANSISTOR/CHIP	2SD2150-T100S	Common	1	AB	B
N	Q110	27958156	FET/CHIP	CPH6301-TL	Common	1	AE	B
N	Q147	27958156	FET/CHIP	CPH6301-TL	Common	1	AE	B
N	Q140	27958157	FET/CHIP	CPH6401-TL	Common	1	AE	B
N	Q900	27958157	FET/CHIP	CPH6401-TL	Common	1	AE	B

N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
		DIODES						
	D757	23901358	DIODE/CHIP/VARI.CAP	MA329-(TX)	Common	1	AC	C
	D130	23901379	DIODE/SHOTTKY	MA729-(TX)	Common	1	AB	C
	D162	23901379	DIODE/SHOTTKY	MA729-(TX)	Common	1	AB	C
	D131	23901820	DIODE/CHIP	1SS355TE-17	Common	1	AA	C
	D160	23901820	DIODE/CHIP	1SS355TE-17	Common	1	AA	C
	D161	23901820	DIODE/CHIP	1SS355TE-17	Common	1	AA	C
	D163	23901820	DIODE/CHIP	1SS355TE-17	Common	1	AA	C
	D778	23901820	DIODE/CHIP	1SS355TE-17	Common	1	AA	C
	D117	23901883	DIODE/SHOTTKY	RB160L-40TE25	Common	1	AC	C
	D120	23901883	DIODE/SHOTTKY	RB160L-40TE25	Common	1	AC	C
	D140	23901883	DIODE/SHOTTKY	RB160L-40TE25	Common	1	AC	C
	D147	23901883	DIODE/SHOTTKY	RB160L-40TE25	Common	1	AC	C
	D900	23901883	DIODE/SHOTTKY	RB160L-40TE25	Common	1	AC	C
N	D100	28953130	DIODE/SHOTTKY	RB051L-40TE25	Common	1	AC	C
		CONVERTER						
	T155	30650713	CONVERTER/DC-DC	6CA-02	Common	1	AM	C
		FUSES						
N	FU101	27975612	FUSE	PI-R431001	Common	1	AC	B
N	FU103	27975612	FUSE	PI-R431001	Common	1	AC	B
N	FU104	27975612	FUSE	PI-R431001	Common	1	AC	B
N	FU102	27975616	FUSE	PI-R43101.5	Common	1	AC	B
		VARIABLE RESISTORS						
	VR151	27751470	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B53	Common	1	AB	C
	VR120	27751484	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B24	Common	1	AB	C
	VR130	27751484	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B24	Common	1	AB	C
	VR381	27751484	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B24	Common	1	AB	C
	VR755	27751484	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B24	Common	1	AB	C
	VR340	27751491	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B54	Common	1	AB	C
	VR344	27751491	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B54	Common	1	AB	C
	VR320	27751827	RESISTOR/SEMIFIXED/CHIP	EVM-1XSX50B13	Common	1	AB	C

MAIN BODY COMPONENT

	1	66110460	PLATE/CASIO	C441170-1	Common	1	AG	X
N	2	66134959	COVER/BATTERY	K341371*1	Common	1	AY	B
N	3	66134970	PLATE/RATING	K441489-1	Common	1	AA	X
N	4	66134980	PLATE/RATING	K441490-1	Common	1	AA	X
N	5	66134990	LABEL/CF	K441492-1	Common	1	AA	X
N	6	66135000	COVER/CF	K341299-1	Common	1	AG	B
N	7	66135010	COVER/CONSOLE	K341298-1	Common	1	AD	C
N	8	66135020	LABEL/COVER	K440064-7	Common	1	AA	X
N	9	66135030	LABEL/BATTERY	K441491-1	Common	1	AA	X
N	10	66135040	LABEL/BATTERY COVER	K441507-1	Common	1	AA	X
N	11	66134958	CAMERA UNIT	K241037*1	Common	1	ET	A
N	12	66135050	CASE/CAMERA	K140491-1	Common	1	AK	C
N	13	10149918	CCD UNIT	LV-027C	Common	1	EG	B
N	14	10149919	STROBE UNIT	CO-778	Common	1	CN	B
N	15	66133900	CONNECTOR (CAMERA)	K441466-1	Common	1	AD	X
N	16	66134963	CASE ASSY/CAMERA	K241032*1	Common	1	BF	C
N	17	66135060	COVER/SENSOR	K341309-1	Common	1	AA	X
N	18	66135070	COVER/SENSOR	K341310-1	Common	1	AB	X
N	19	66133870	CABLE	K140489-1	Common	1	BM	X
N	20	66134964	CASE/SIDE/CAMERA	K241035*1	Common	1	AT	C
N	21	27251351	LCD	COD25T2021RN	Common	1	DO	B
N	22	34122089	SWITCH/SHEET	IB-VC-YO361	Common	1	BC	X
	23	66114390	NUT/TRIPOD	R340024-1	Common	1	AD	X
N	24	66133880	CABLE/FLAT	K441456-1	Common	1	AF	X
N	25	66134965	BL ASSY	K241055*1	Common	1	CK	A
N	26	66134966	PCB ASSY/LINEAR	K341359*1	Common	1	DK	A

N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
N	27	66135130	CASE/UPPER	K140483-1	Common	1	AT	C
N	28	66135140	PANEL/DISPLAY	K240987-1	Common	1	AK	X
N	29	66135150	COVER/LED	K441467-1	Common	1	AA	X
N	30	66135160	BUTTON/DISPLAY	K341301-1	Common	1	AG	C
N	31	66135180	SPACER	K441481-1	Common	1	AB	X
N	32	66135190	HOOK/STRAP	K441454-1	Common	1	AD	X
N	33	66135200	HOOK/STRAP	K441455-1	Common	1	AD	X
N	34	30121601	TRANSFORMER/INVERTER	BL2.5K778	Common	1	BG	C
N	35	38512102	LAMP/FLUORESCENT	CAS-1.8JS2.5-1	Common	1	AW	B
N	36	34122090	SWITCH UNIT	IB-VC-YO355	Common	1	CF	B
N	37	66134967	HOLDER/BATTERY	K341370*1	Common	1	BB	X
N	38	66134968	PCB ASSY/DIGITAL	K341372*1	Common	1	EF	A
N	39	66135290	CASE/LOWER	K140484-1	Common	1	AS	C
N	40	66135300	COVER/LOWER CASE	K140485-1	Common	1	AK	C
N	41	66135310	COVER/IRDA	K341303-1	Common	1	AA	X
	42	38150796	BATTERY/LITHIUM	CR2016-CM1	Common	1	AN	C
		66135331	BATTERY/SPRING A-K778	K441453A-1	Common	1	AB	C
		66136861	BATTERY/SPRING B-K778	K441611A-1	Common	1	AA	C
		66140770	BATTERY/SPRING CB-K777	K441706-1	Common	1	AB	C
N		35022475	BUTTON/EJECT/CF	55024-0091	Common	1	AK	X
N		35022476	SHELL/EJECTOR/CF	58624-0001	Common	1	AK	X
N	E	58613787	E-RING	2.0 JISB2805	Common	1	AA	X
	S1	51120906	SCREW	BT3 1.7X5 NI	Common	5	AA	X
	S3	58603381	SCREW	PS3 1.7X4	Common	11	AA	X
	S4	58600420	SCREW	BT3 1.7X4 NI	Common	4	AA	X
	S5	58601477	SCREW	BT3 1.7X3.5	Common	8	AA	X
N	S6	58605733	SCREW	BT3 1.7X12 NI	Common	1	AA	X
	S7	66307430	SCREW	K440305-1	Common	1	AA	X
N	S8	58613773	SCREW	ST1 2X2.2 NI	Common	1	AA	X
N		19153723	IGBT	CT25AS-8	Common	1	AX	C

ACCESSARIES

N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
		10148773	CABLE/VIDEO	VC-K723-FC	Common	1	AR	X
N		10149920	CASE/SOFT	SC-778	Common	1	AX	X
		20126146	CARD/CF	SDCFB-8-200QV-T	Except for US	1	DH	X
N		38512103	STRAP	ST-K778	Common	1	AZ	X
		10149958	CD-ROM	CK754CCC01R	Except for US	1	AP	X
		10148962	CABLE/PC-LINK	LC9F-DOS-K740	Except for US	1	BW	X

ADJUSTMENT FILTER

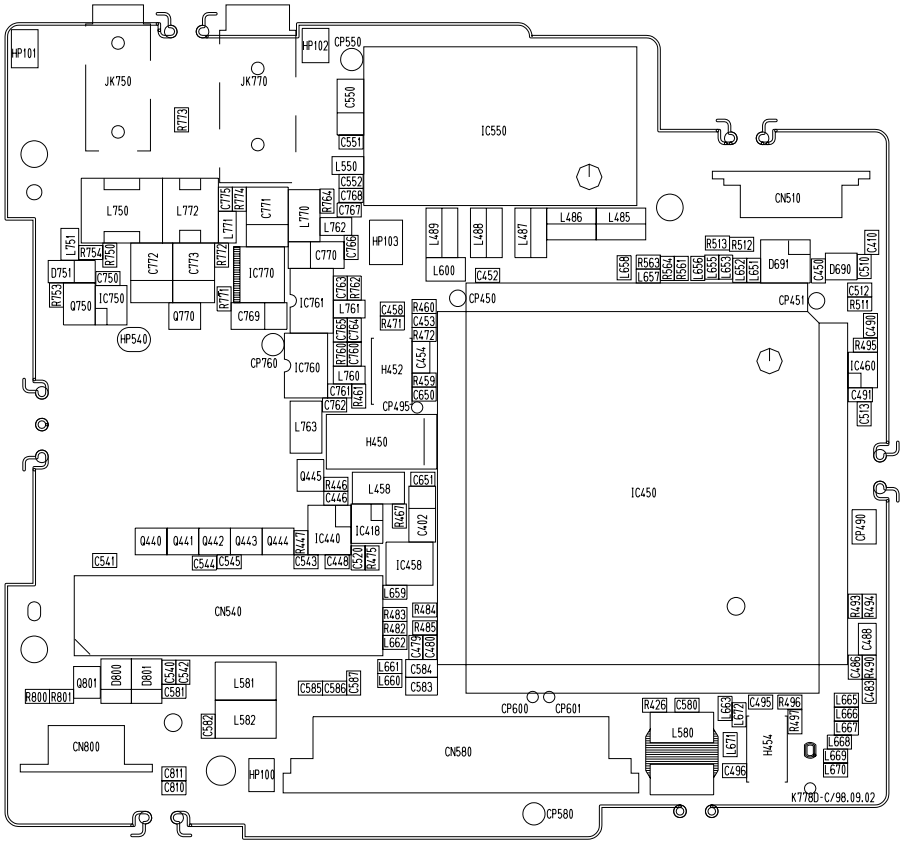
N	Item	Code No.	Parts name	Specification	Appricable	Q	PRICE CODE	R
		19045436	FILTER/ND	ND10(50X50)	Common	1	DP	A
		19045437	FILTER/ND	ND20(50X50)	Common	1	DP	A
		19045438	FILTER/COLOR	LA10(50X50)	Common	1	DP	A
		19045439	FILTER/COLOR	LA10(50X50)	Common	1	DP	A

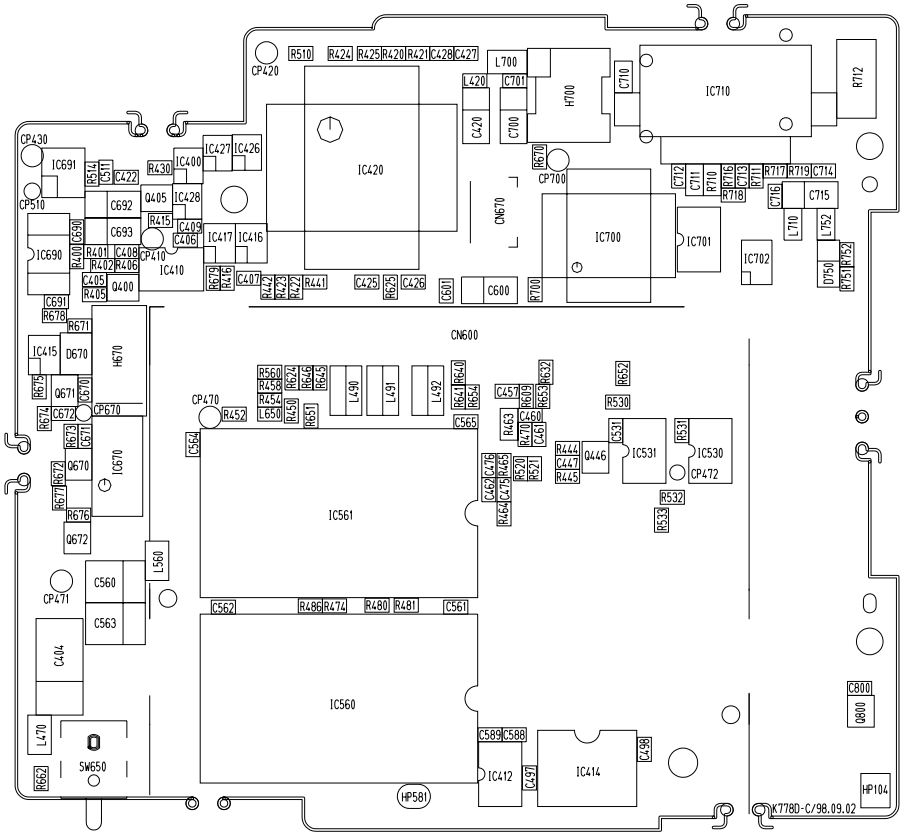
SELES OPTION

			Option Name	Specification	Capacity
			MEMORY CARD	CF-4X	4MByte
			MEMORY CARD	CF-8X	8MByte
			MEMORY CARD	CF-15X	15MByte
			MEMORY CARD	CF-30X	30MByte
			MEMORY CARD	CF-48X	48MByte

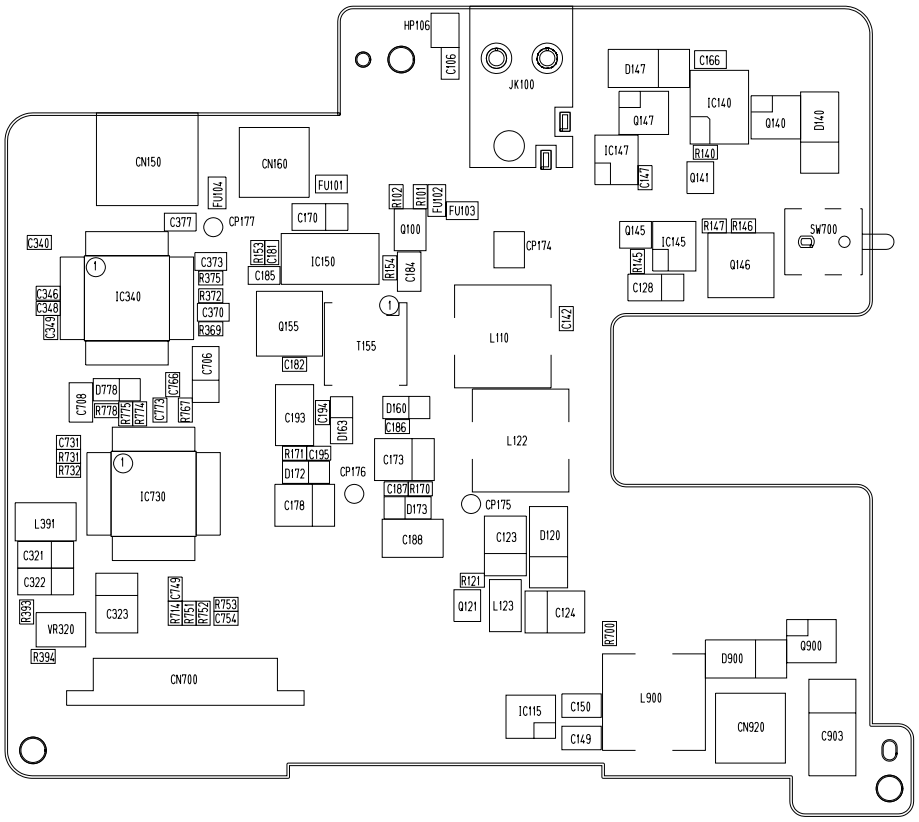
PRINTED CIRCUIT BOARDS

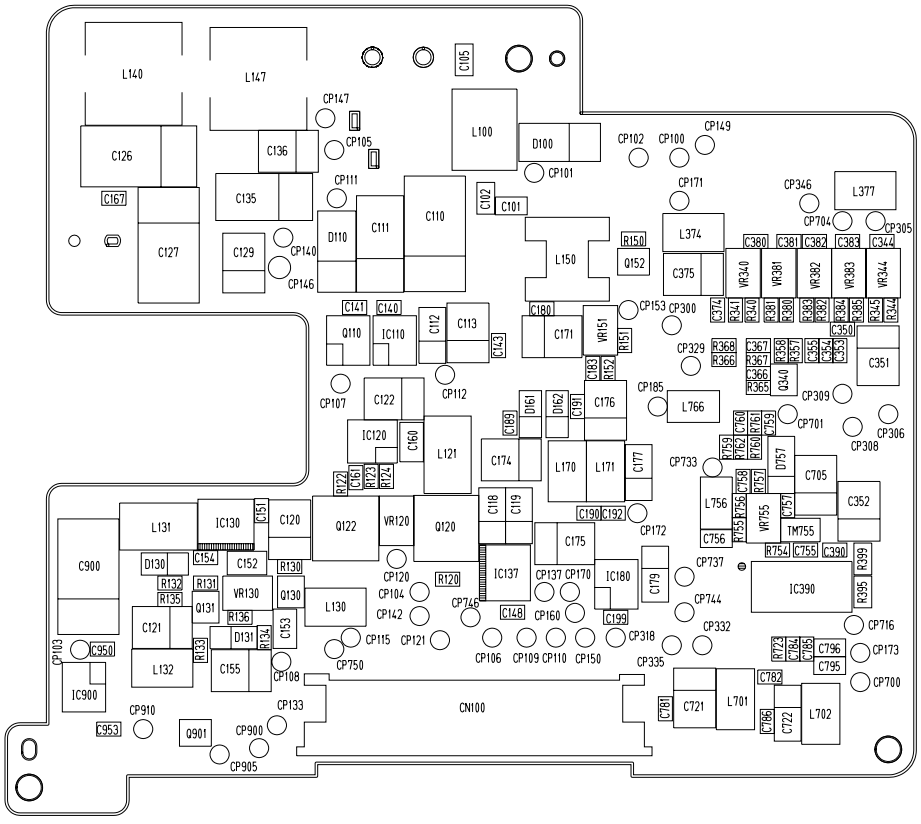
D-PCB (PCB-778D)



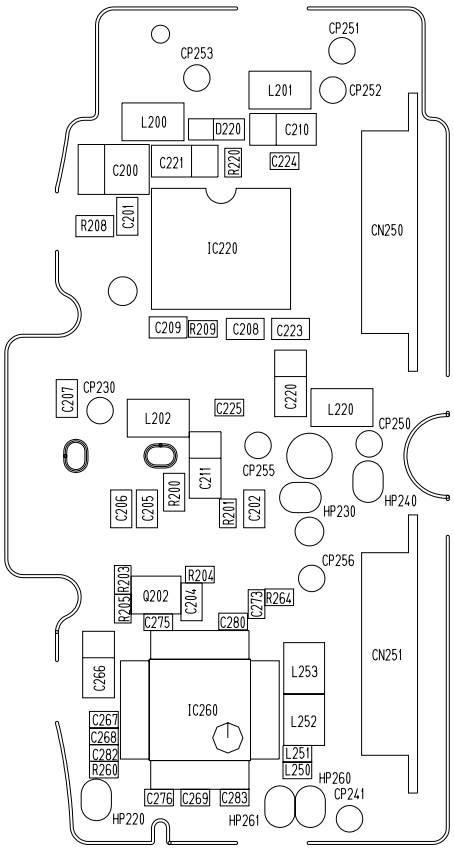


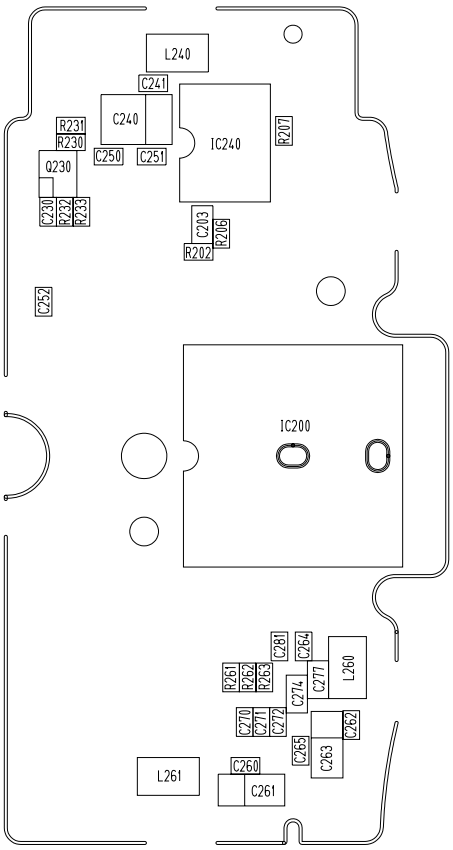
L-PCB (PCB-778L)





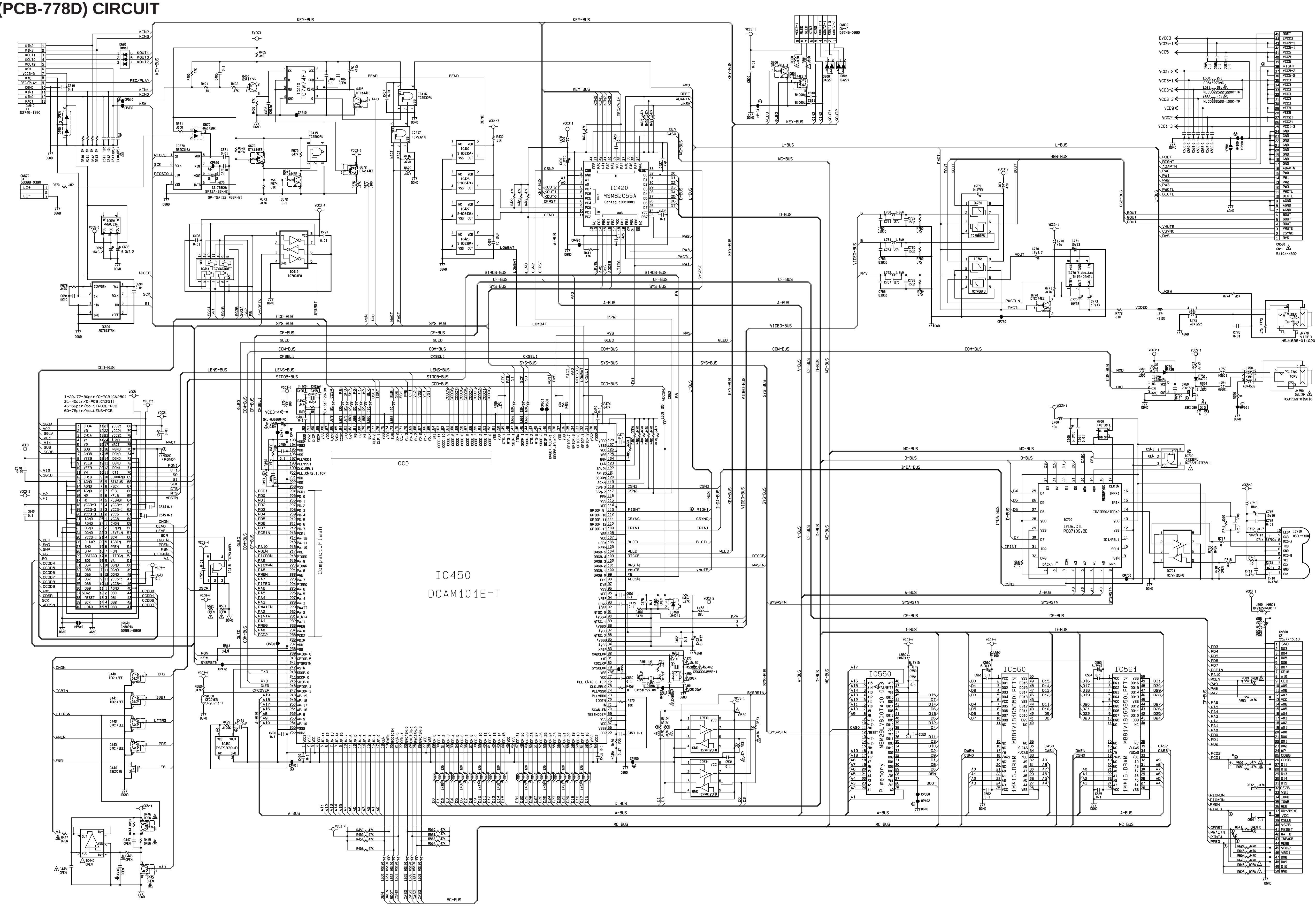
C-PCB (PCB-778C)



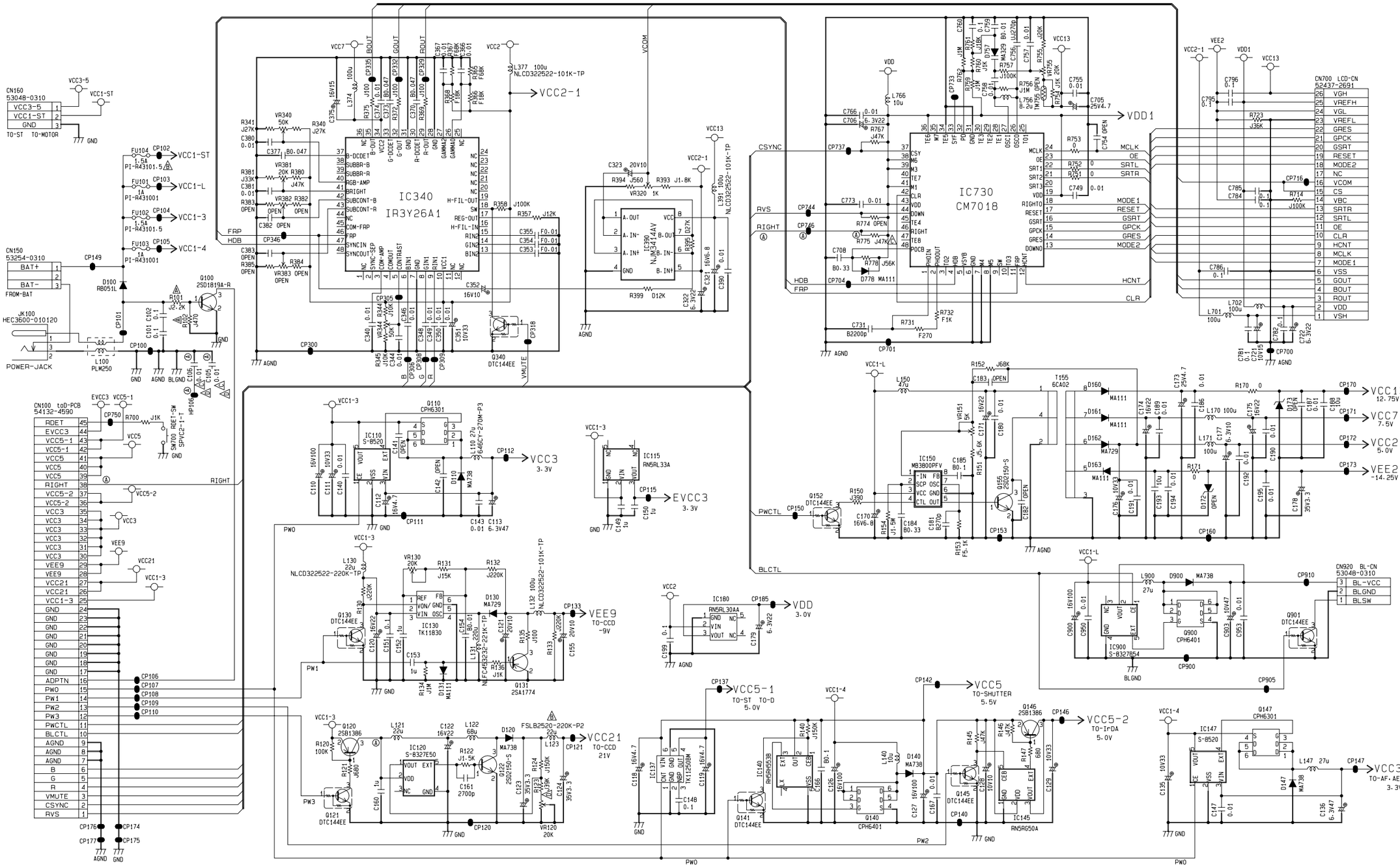


SCHEMATIC DIAGRAMS

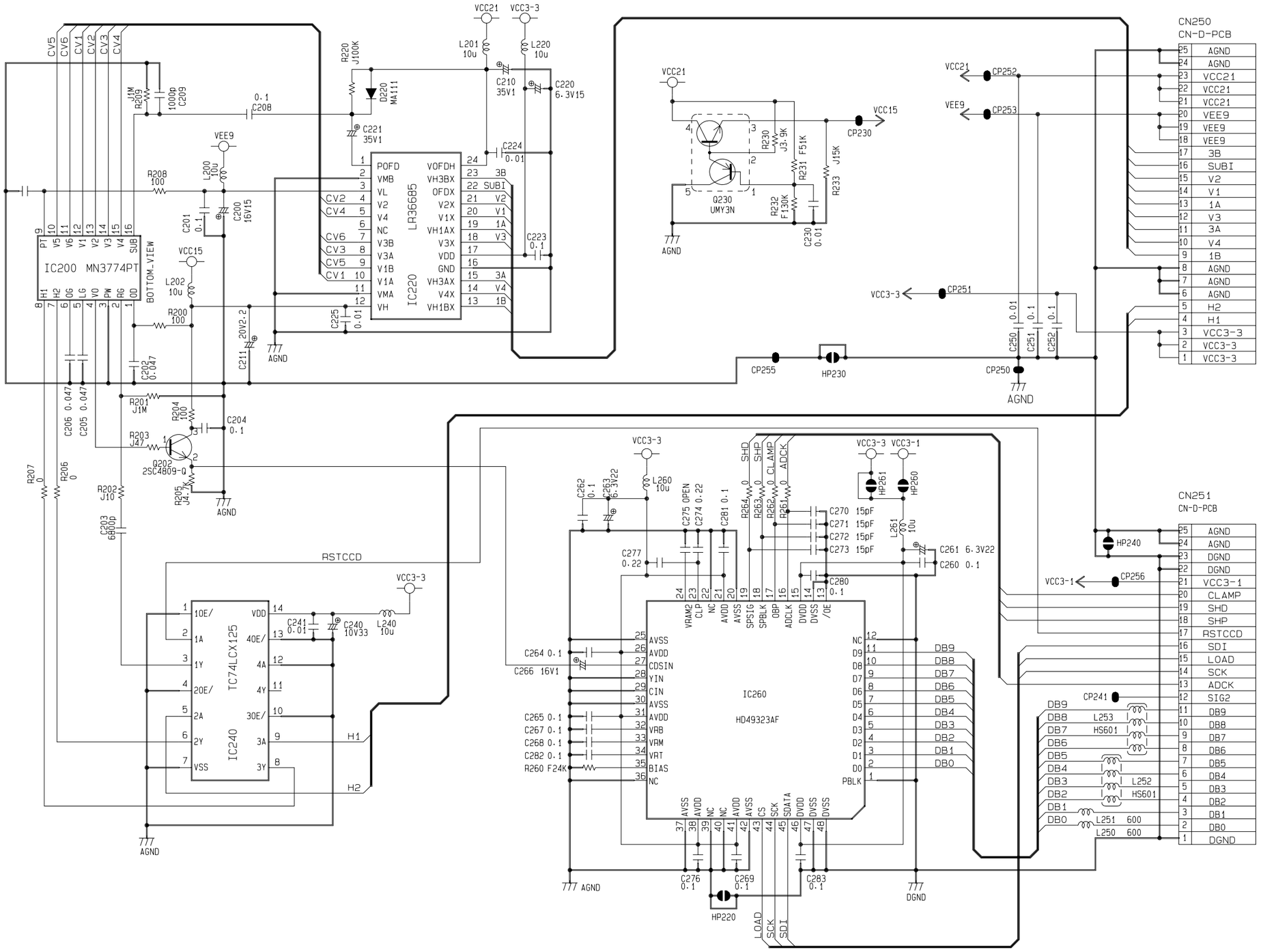
D-PCB (PCB-778D) CIRCUIT



L-PCB (PCB-778L) CIRCUIT



C-PCB (PCB-778C) CIRCUIT



TROUBLESHOOTING

Trouble1 : Power turns off while in operation.

cause1

To prevent CF data error, the unit will automatically turn off when CF cover opens.
For product serial number 1022100 (program version 98082901) a shock to the camera (i.e. key operation, lens rotation, etc.) may produce chattering to CF switch which may erroneously detect that CF cover is open. To prevent this change the software.

Program to use (CF card × 1)
KX-778PROGRAM Ver. 100102

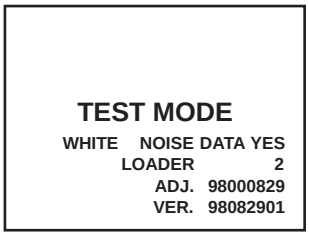
Action1 (Procedure to change software)

Note1: Use AC adaptor when changing program.
Note2: While TEST MODE is displayed, always follow the operations shown.
Others: For regular operations such as inserting or ejecting CF card, refer to owner's manual.

(1) Error check
Insert the CF card that comes with the unit.
Turn power on, then tap the right side of the unit with finger. Make sure power turns off detecting a shock. (Even if it dose not turn off, proceed to the next step.)

(2) Check program Ver.
Turn power on pressing DISP button and MENU key at the same time.
(TEST MODE appears on the screen.)
Only proceed when program Ver. 98082901 is displayed.

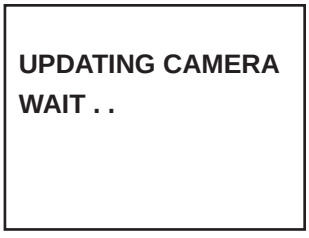
LCD display



← Program version

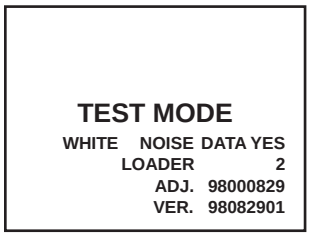
(3) To rewrite program
Insert a CF card then turn power on pressing DISP button and MENU button at the same time, then it will automatically start to rewrite program.
The power will automatically turn off in 27 seconds.

LCD display



(4) Check program Ver.
Insert CF card that comes with the unit. Then turn power on pressing DISP button and MENU button at the same time. Make sure program version is 98100102.
Turn power off then on again and make sure recording and playing functions alright.

LCD display



← Program version

(5) Erroneous correction check
Insert the CF card that comes with the unit. Turn power on, then tap the right side of the unit with a finger. Make sure the unit does not turn off.

Trouble2 : Power does not turn on.

cause1. Shortcircuit.
action1. Replace fuse.

cause2. CF cover is open.
Detect switch is broken.
action2. Close memory card cover.
Replace detect switch.

cause3. No flat cable or broken flat cable between D PCB ass'y and L PCB ass'y.
action3. Replace or install flat cable.

cause4. No flat cable or broken flat cable between D PCB ass'y and switch unit.
action4. Replace or install flat cable.

Trouble3 : Video screen failure. LCD display is OK.

cause1. Setting of NTSC/PAL is incorrect.
action1. Set the video output appropriate for the TV.
After replacing D PCB ass'y always check the setting.

Trouble4 : No flash

cause1. Bad connection between D PCB ass'y and camera unit.
action1. Reconnect connectors.

cause2. Flash unit failure.
action2. Replace flash unit.

Trouble5 : Display shows;

CF
CF ERROR
FORMAT MENU

cause1. Error in CF data.
action1. Refer to the owner's manual.
CF can be handled the same way as hard drive.
The actions noted below can be taken. No guarantee about the display.
(1) Set CF card to a PC using PC card adapter.
(2) Save files in the memory card.
(3) Execute scan disk program for CF card and recover the data error or format the disk.
(4) Copy the correct file in memory card.

cause2. CF card hard error.
(Unable to format or scan disk)
action2. Replace CF card.

cause3. Connector for CF card on D PCB ass'y or circuit is broken.
action3. Replace connector or D PCB ass'y.

Trouble6 : Display shows;

SYSTEM ERROR
CALL TECH
SUPPORT

cause1. Bad connection between D PCB ass'y and camera unit.
action1. Reconnect connectors.

cause2. Erroneous EEPROM. (Dose not include CF card.)
action2. Execute check program for D PCB ass'y. If no good, replace it.

Trouble7 : Display shows;

CF
NO CARD

cause1. No CF card.
action1. Insert CF card.
cause2. Connector for CF card on DA PCB ass'y or circuit is broken.
action2. Replace connector or DA PCB ass'y.

Trouble8 : LCD dose not work, but Video is OK.

cause1. OPEN LCD connector or BL connector.
action1. Insert to connector. If broken, replace it.

Trouble9 : Display failure when flash is used.

cause1. Noise when flash is in operation.
action1. Refer to “Strobe operation check on page 8”.

Trouble10 : Unable to switch between REC and PLAY.

cause1. Switch unit broken or bad installation.
action1. Replace or reinstall switch unit.

Trouble11 : Wrong time

cause1. Time data error.
action1. Reset time.

cause2. Lithium battery is dead.
action2. Replace lithium battery.

cause3. Bad DA PCB ass’y.
action3. Refer to ”Clock oscillation check” on page 13.

Trouble12 : Battery consumption is fast.

cause1. Differs between manufacturers, types, temperatures, and storage time.

cause2. Current consumption is high.
action2. Check current consumption. Repair the problem.

cause3. Kept battery in the camera itself for a long time.
action3. If not planning to use the camera for a long period of time, remove batteries.
(Even when power is turned off, electricity is consumed.)

Trouble13 : When switching form PLAY to REC, display turns blue and key operations do not work.(Also unable to turn power off.)

cause1. Bad connection between D PCB ass’y and camera unit, or broken camera unit.
action1. Reconnect connector, or replace D PCB ass’y or camera unit.

Trouble14 : Blur display.

cause1. Dirty lens.
action1. Clean lens.

cause2. Broken CL unit.
action2. Replace CL unit.

Ver.1 : Condition added on page 5

Correct : 1-2. White balance · Sensitivity adjustment

2. Adjustment procedure

9) Compensation program.
Connect QV-7000SX and PC with a link cable.
Set the camera in PLAY MODE.

Error : 1-2. White balance · Sensitivity adjustment

2. Adjustment procedure

9) Compensation program.
Connect QV-7000SX and PC with a link cable.

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